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July 17, 2012

Janet Kieler
Permits Section Manager
Water Quality Control Division
Colorado Dept. of Public Health & Environment
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

Re: CMA Comments on Recently Issued General Permit for Stormwater Discharges
from Non-Extractive Industrial Activity (COR900000)

Dear Ms. Kieler:

The Colorado Mining Association (CMA) is aware that the Water Quality Control Division (WQCD) of the Colorado Department of Public Health and the Environment (CDPHE) recently issued a new general permit for stormwater discharges from non-extractive industrial activity (COR900000) (issued March 7, 2012; effective July 1, 2012). The CMA is concerned with the approach taken in that permit (*see* Supplemental CMA Comments on CDPS General Permit for Stormwater Discharges Associated with Non-Extractive Industrial Activity (CMA's Comments) (copy enclosed)). CMA also is concerned with the manner in which CDPHE appears to have dismissed or disregarded legitimate stakeholder concerns.

General Substantive Concerns

As explained at length in its previously-submitted comments, CMA is concerned with certain aspects of the approach taken in the new non-extractive permit. It is readily apparent that CDPHE simply desired to adopt the 2008 federal Multi-Sector General Permit (MSGP), notwithstanding substantial industry opposition, rather than craft a permit specific to Colorado. In so doing, CDPHE has embraced concepts that in practice impose great economic and administrative burdens with little to no compensating environmental benefit, including inflexible "practice-based effluent limits," numeric benchmarks, and broad-ranging conditions triggering "corrective action."

That CDPHE chose to take this unreasonable approach is all the more baffling given that it is not consistent with the positions taken (and apparently supported by CDPHE) by the Association of State and Interstate Water Pollution Control Administrators (ASIWPCA) (now known as the Association of Clean Water Administrators). *See* Letter from ASIWPCA to Peter Silva, Assistant Administrator, and Nancy Stoner, Deputy Assistant Administrator, U.S. Environmental Protection Agency ("EPA"), dated Nov. 9, 2010; Letter from ASIWPCA to Lisa Jackson, Administrator, EPA, dated Jan. 31, 2011; and Letter from ASIWPCA to Kevin Weiss, Water Permits Division, EPA, dated May 16, 2011 (enclosed). Colorado is a named member of and Steve Gunderson of CDPHE is Vice President of the organization.

These letters to EPA cautioned against "wet weather initiatives which embrace a one-size-fits-all mentality." They warned that "stormwater management involves highly variable and unpredictable loadings which do not easily fit into the current regulatory permitting requirements." They recommended the use of "intuitive BMP-based standards." And they insisted that regulators "weigh the high cost/regulatory burden of a wholesale application of a new NPDES permit against the environmental returns."

These letters also called for "precipitation-driven discharge regulations within NPDES [to] be built around the unpredictability of stormwater, and [to] recognize BMPs where selected as the most appropriate and protective control by the permitting authority, and designed, installed, and maintained to specified standards, as fully meeting permit requirements" in order to "support and foster regional and state-specific approaches that account for differences in precipitation frequency and amount, climate, topography, soil, and development patterns."

With respect to stormwater monitoring, the ASIWPCA letter dated January 31, 2011 stated as follows:

States have strong concerns about how EPA establishes monitoring requirements in this rule [EPA had proposed a revised stormwater rule in response to the 50th anniversary of the Clean Water Act]. Monitoring requirements for stormwater must be robust enough to ensure the data is useful and the collection costs are proportionate to the applicability for water quality. The window of opportunity for obtaining representative samples is very narrow and can vary due to a number of factors, including prior weather conditions and size of drainage area. At least one state has concluded that stormwater monitoring requirements may not be worth the cost/effort. Instead, this state has replaced the monitoring requirements with an inspection program funded by fees charged to the regulated facility. The state was able to garner industry support for these fees by eliminating the monitoring requirement, which has resulted in a greater field presence and cooperation from facility operators.

States have significant experience in stormwater monitoring and highly recommend further dialogue on the option/issues, prior to EPA moving too far down any one path this rulemaking. While states agree there must be some method of assessing the effectiveness of the program, there are many different assessment approaches that can lead to success and should be considered.

In light of the above statements and the enclosed ASIWPCA letters, CMA encourages a different permitting approach to occur with respect to any reissued permit for stormwater discharges from the extractive industry. Rather than simply following EPA's failed lead, CDPHE should address stormwater using the approach outlined in the enclosed letters.

Additional Concerns

CMA has previously voiced its concerns regarding the approach taken by CDPHE in the non-extractive permit through the notice and comment rulemaking process. However, CDPHE's response to CMA's and other stakeholder comments was insufficient to fulfill CDPHE's regulatory obligations and ultimately appeared to take positions at odds with the approach outlined in the enclosed ASIWPCA letters.

For example, consider CDPHE's response to several comments, including in particular comments submitted by CMA (see pp. 1-2 of CMA's Comments) that the new permit appeared to impose additional requirements both on permittees and CDPHE without a corresponding environmental benefit. CDPHE defended its imposition of what it admitted would be a significantly increased burden by stating that it observed an "identified gap in the quality of the current industrial stormwater permits relative to [EPA's] MSGP, other state permits, case law, and statutory and regulatory direction provided." The only information provided to back up this broad assertion is the following language:

As indicated in the Fact Sheet that accompanied permit COR900000, Division observations during compliance inspections of permitted industrial facilities indicate non-compliant field conditions, which have the potential to result in discharges of pollutants from the facility to state waters.

In addition, the Division conducted a review of sampling results for years 2000 – 2010, submitted to the Division by those industrial sectors required to conduct annual sampling of stormwater discharges from their facilities. In general, for facilities that reported sampling data, results demonstrate that all sectors exceeded either the applicable benchmark values or federal ELGs, for at least one parameter (this review included those sectors required to sample under both the existing Heavy and Recycling stormwater permits; the existing Light industrial stormwater permit does not require sampling).

Also, available scientific literature and EPA's industrial stormwater fact sheets provide information with respect to the types and quantities pollutants discharged with stormwater. Together, this information indicates that industrial facilities continue to discharge pollutants in stormwater from their facilities at levels that have the potential to cause or contribute to an exceedance of water quality standards, and substantiates the Division's determination that the time was appropriate for a comprehensive review of all industrial stormwater permits up for renewal.

This language does not support in any way CDPHE's assertions that there is an identified gap. First, the reference to observations during compliance inspections and the resulting potential for discharges of pollutants from the facility to state waters simply represents the activity that the permit is intended to authorize, that is, the discharge of pollutants in stormwater runoff from industrial facilities after implementation of economical and feasible stormwater controls. CDPHE is attempting to establish the need for additional permitting requirements with the fact that there are still potential pollutants being discharged in stormwater runoff. This response evidences a misunderstanding of the stormwater permit program – the program authorizes the discharge of pollutants in stormwater runoff to receiving waters as long as certain feasible management controls have been implemented.

Second, the statement that facilities are exceeding either benchmark values or federal ELGs does not provide a basis for concluding that there is a "gap" in the current permit process. There is little to no correlation between the benchmark values and stormwater control effectiveness or even impacts on receiving water quality during stormwater events. In the absence of such a correlation, CDPHE's review does not justify increased permit requirements. Furthermore, the existing permit already requires compliance with applicable federal ELGs and provides specific enforcement in the event of non-compliance. A facility's exceedance of federal ELGs calls for CDPHE to *enforce* the existing permit, not to *expand* its requirements.

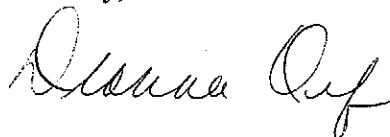
Finally, CDPHE's statement that "facilities continue to discharge pollutants in stormwater ... at levels that have the potential to cause or contribute to an exceedance of water quality standards" is without any basis. CDPHE has offered no in stream monitoring results suggesting that stormwater discharges are actually causing or contributing to water quality exceedances under the existing permit. In the absence of such information, it is inappropriate for CDPHE to rely on subjective observations during compliance inspections and selective comparison of stormwater sampling results with benchmark values to allege that receiving waters are being impacted during storm events from permitted stormwater discharges.

Unfortunately, the passage above is not the only instance in which CDPHE gave an inadequate response to industry concerns. Below are several examples of how legitimate stakeholder concerns were given limited to no consideration.

- On page 9 of its response to comments document, CDPHE states that it must include certain provisions in permits without consideration of the compliance cost or burden. CDPHE gives an example of such provisions by stating that it must include an effluent limit where a discharge causes, or has the reasonable potential to cause an exceedance of a water quality standard. However, CDPHE makes no showing or statement that current stormwater discharges in Colorado are causing or contributing to water quality exceedances.
- On page 11 of its response to comments document, CDPHE inadequately responds to CMA's comment on the imposition of stringent and inflexible "practice-based effluent limits." If CDPHE really believes that the imposition of the "practice-based effluent limits" are equivalent to "technology-based effluent limits" then at the very least it must comply with the NPDES regulations regarding such determinations (see 40 C.F.R. 122.44(a)(1); 40 C.F.R. 125.3(c)(2) (requiring issuing agency to apply appropriate factors (including cost listed in 40 C.F.R. 125.3(d) when imposing technology-based effluent limitations in permits based on "best professional judgment" as well as the consideration of other information)). There is no record suggesting that CDPHE considered such factors or went through the required regulatory process for establishing technology-based effluent limits.
- On page 12, CDPHE simply disagrees with CMA's concerns about the proposal to impose benchmark monitoring in the non-extractive general stormwater permit without any explanation. Rather, CDPHE merely refers to and suggests that it agrees with an EPA statement from the 2000 MSGP that "there is presently no alternative that provides stakeholders with an equivalent indicator of program effectiveness." Imposition of benchmarks without any real justification as to why the benchmarks are appropriate for stormwater discharges in Colorado is arbitrary and inappropriate. In addition, CDPHE's response that it agrees with EPA's statement is directly at odds with the positions taken in the enclosed ASIWPCA letters, of which Colorado and CDPHE are members.

In summary, CDPHE's inadequate response to CMA's (and other stakeholders') comments reveal that CDPHE had no real or identifiable rationale for moving ahead with its new and burdensome permitting approach. In addition, the stakeholder process involved in the non-extractive industry permit appeared to be very one-sided. The reissuance of the extractive industry stormwater general permit should not be undertaken in the same fashion. Rather, CMA encourages a robust and involved stakeholder process to ensure that all permit provisions are justified in terms of impact and cost to permittees and the state, consistent with the approach and general concepts outlined in the enclosed ASIWPCA letters.

Sincerely,



Enclosures

cc: Steven H. Gunderson, Director, WQCD, CDPHE



Association of State and
Interstate Water Pollution
Control Administrators

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May 16, 2011

Kevin Weiss
Water Permits Division
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Room 7334 EPA East
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Washington, DC 20460

Re: Comments on November 12, 2010 TMDL/Stormwater Memorandum

Dear Mr. Weiss:

The Association of State and Interstate Water Pollution Control Administrators (ASIWPCA) is pleased to provide the comments on the November 12, 2010 Memorandum, *Establishing Total Maximum Daily Load (TMDL) Waste Load Allocations (WLAs) for Storm Water and NPDES Permit Requirements Based on Those WLAs* (hereinafter "memorandum"). (www.epa.gov/npdes/pubs/establishingtmdlwla_revision.pdf)

Celebrating its 50th Anniversary this year, ASIWPCA is the national voice of state, interstate, and territorial officials (hereinafter "states") responsible for implementation of programs that protect surface waters across the nation—including the stormwater program. As our members emphasized on the December 8, 2010 call we held with you to discuss the memorandum, states support continual improvement and evolution of critical water quality programs like the TMDL and stormwater programs. However, as these programs mature and evolve, we urge EPA to discuss policy shifts with the state coregulators early, and before releasing final documents. This can help draw upon state and interstate collective knowledge and experience. In this case, we could have provided further guidance on our work in the area of regulating precipitation-driven discharges and in piloting the approaches EPA advances in this memorandum. Based on the volume of stakeholder input following the memorandum's release, we commend the Agency for accepting comments on it and for considering changes to clarify several statements and concepts contained in it. On a broader level, given the significant activity in the area of stormwater, ASIWPCA urges EPA to continue close coordination with states on the full spectrum of stormwater issues.

Fundamentally, states support modification and refinement of the federal stormwater program to improve its effectiveness. We agree that meaningful water quality improvement can be achieved with greater control of stormwater runoff. While there is some variation between states regarding approaches they use for stormwater effluent limitations, stormwater surrogates, and to aggregate/disaggregate sources, there is complete consensus that states be allowed to maximize the flexibility when making their determinations. There is also consensus that establishing defensible numeric limits for stormwater discharges can sometimes require a complex and costly analysis, and that this approach may not be possible in many watersheds.

Recommendation: EPA's revised memorandum should specifically emphasize the flexibility states have to make stormwater permit and management decisions that reflect local conditions.

Recommendation: EPA should provide additional targeted resources to those states that, due to extensive monitoring data, are able to separate out stormwater contributions in TMDLs, to establish scientifically defensible WLAs for stormwater surrogates, and to set end-of-pipe numeric effluent limitations that account for stream conditions.

Recommendation: EPA should add the following sentence to the beginning of the revised memorandum: "This memorandum is not a regulation and does not impose legally binding requirements on EPA or States. This guidance reiterates and clarifies previous Agency guidance and may be changed or revoked at any time."

TMDLs

EPA's memorandum presents implementation challenges for many states. For example, most TMDLs do not include site-specific stormwater Best Management Practices (BMPs). Likewise, numeric stormwater effluent limitations are not always feasible, and may in fact be unnecessary to meet water quality goals. While significant advances have been made in quantifying stormwater discharges, the vast majority of TMDLs developed and adopted by states contain estimated rather than precise stormwater loading assumptions. In some parts of the country, stormwater may not necessarily be the real cause of, or contribution to, impairment.

The primary goal of a TMDL and the associated allocations is to establish linkages between sources and effects, and to equitably assign resources and responsibility for reductions among all sources contributing to the water body impairment. Given the interplay between storms, sources on the ground, and receiving waters, even the best BMPs can be rendered ineffective by storm variations. Further, the act of disaggregating sources and their allocations implies a precision and accuracy in the supporting data that only a few state agencies have. States are concerned with how EPA's memorandum will affect TMDL work that is in progress and MS4 permits that are currently up for renewal. We are concerned that the shift in expectations articulated in the memorandum could result in fewer TMDLs being completed and implemented.

Recommendation: To achieve broader water quality success, EPA should articulate in the revised memorandum plans to take a more comprehensive look at the TMDL program in the future, to find the best way to consider and incorporate stormwater-driven impairments. Such a review of the program should occur after extensive conversations with states, and likely would require a rulemaking.

TMDLs are of limited value when the impairment is wholly due to nonpoint sources, as few states have enforceable laws, rules, or policies that mandate BMP implementation. ASIWPCA supports the recent proposal provided by the New England Interstate Water Pollution Control Commission (NEIWPCC), which would allow communities to develop long-term stormwater plans that consider cost and allow sufficient time for implementation and compliance.

Recommendation: The revised memorandum should reference EPA's plans to develop opportunities and resources for states, MS4s, and municipalities to develop alternative watershed remediation plans where impairment is wholly driven by nonpoint sources.

NPDES Permits

States believe that continuing to treat stormwater like traditional point source effluent, utilizing the same regulatory scheme, policy guidelines, and NPDES permit approaches, will fail in achieving water quality benefits. It is time for regulatory requirements and policies designed specifically for precipitation-driven

discharges. Cost effective, environmentally sound, and sustainable stormwater management will only be possible when the realities and uncertainties of stormwater science are acknowledged, and the “point source” NPDES regulatory framework is reworked to include this science. This has been proven for over 20 years by states that have been implementing stormwater regulatory programs for new development and redevelopment. The future of stormwater regulation begs for creativity, innovation, and full collaboration between the federal and state governments.

ASIWPCA has previously recommended that EPA make regulatory changes to divide the § 402 program into two categories: precipitation-driven discharges and traditional process wastewater, end-of-pipe discharges. This will allow new and current regulations and guidance for stormwater to be clear and appropriate through stormwater-specific language. The new and revised precipitation-driven discharge regulations can be built around the unpredictability of stormwater, and recognize that BMPs, where selected as the most appropriate and protective control by the permitting authority, when designed, installed, and maintained to specified standards, fully meet permit requirements. This new stormwater program can then support and foster regional and state-specific approaches that account for differences in precipitation frequency and amount, climate, topography, soil, and development patterns. Where waters are impaired under the CWA, these new regulations can promote adaptive management and timeframes to implement retrofits. Fairness can be promoted among states, communities, existing and new development, and between process wastewater discharges and precipitation-driven discharges.

Recommendation: EPA should connect by reference the revised memorandum to the ongoing stormwater rulemaking. Separately, we strongly recommend that EPA revisit the scope and pace of the stormwater rulemaking so that states and EPA can fully discuss alternative approaches and possible fundamental changes to the underlying regulations for precipitation driven discharges.

Numeric Effluent Limitations

Significant confusion was created by EPA's use of the term numeric effluent limitations in the original memorandum. The revised memorandum must clarify that EPA is not shifting from a largely BMP-based program. The revised memorandum should also emphasize that while a few states have been able to develop tools that provide technically sound end-of-pipe numeric effluent limitations; this experience has been site-specific and is not easily translatable to other parts of the country. Likewise, the use of stormwater surrogates such as impervious cover or flow by states continues to be explored, but the lack of data and resources needed to implement surrogate based programs limits these efforts. Further, use of numeric limits sometimes can undermine the flexibility necessary to adaptively manage stormwater impacts. States that are now using stormwater surrogates still find value in having an adaptive approach available. This flexibility is especially important as climate change continues to influence the models and studies used by states to support their decisions.

Recommendation: EPA's revised memorandum must state that the Agency does not anticipate that “end-of-pipe, effluent limitations on each MS4 outfall approach” will be used very often, but that this tool certainly remains open and viable should the permitting authority find it to be a scientifically supported approach in a particular situation.¹

¹ At least one state very much supports using numeric end-of-pipe effluent limits, along with the best management practice based effluent limits, as both viable tools for regulating stormwater discharges from MS4s, industrial activities, and construction activities. This is why our comments emphasize the importance of EPA emphasizing in its revised memorandum that states have discretion to include one or both of the approaches in permits as appropriate.

Recommendation: EPA's revised memorandum should emphasize that states are afforded significant flexibility in choosing numeric effluent limitations in stormwater permits and the importance and value of other, adaptive approaches.

Recommendation: EPA's memorandum should include examples of approaches for establishing alternatives to end-of-pipe numeric effluent limitations taken by different states around the country.

The memorandum seems to imply that states should replace "maximum extent practicable" with "feasible". The use of the term "feasible" appears to relate to the state's technical ability to calculate the necessary limitations, whereas the maximum extent practicable standard is intended to capture both the technical and economic achievability of the controls imposed on municipal dischargers.

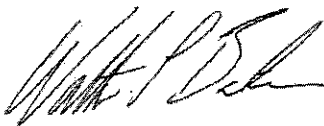
Recommendation: EPA's should work with states to clarify the Agency's intent regarding feasibility and maximum extent practicable.

Conclusion

Stormwater runoff remains a leading source of water quality impairment in many states. In these geographic locations, stormwater management represents the most important opportunity for continued improvement in water quality. States support EPA's desire to improve and enhance stormwater program capacity. ASIWPCA encourages EPA to consider the significant benefits that exist in regulating precipitation-driven discharges in a fundamentally different way than traditional, end-of-pipe, process wastewater point source discharges.

Given the complexity of the issues and diversity of state approaches, EPA must be very thoughtful in balancing national consistency with state flexibility as it proceeds with updating this memorandum and with the stormwater rulemaking. EPA must also be sensitive to the ongoing work of states to implement TMDLs and renew permits, and recognize that midcourse corrections can present challenges to states. New stormwater guidance presented in a vacuum, separate and apart from the major rulemaking that is going on, may lead to confusion, wasted effort, litigation, lost opportunities, unnecessary costs, and less protected/restored waters. Once again, we strongly encourage EPA to work closely with the states moving forward on this memorandum and the related monitoring, permitting, and implementation issues.

Sincerely yours,

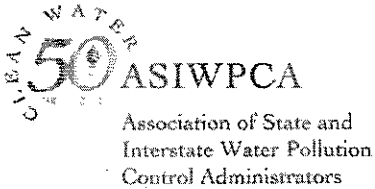


Walter L. Baker, P.E.
Director, Utah Division of Water Quality
ASIWPCA President

Cc:

Jim Hanlon, Director, Office of Wastewater Management
U.S. Environmental Protection Agency

Denise Keehner, Director, Office of Wetlands, Oceans, & Watersheds
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Executive Director & General Counsel,
Alexandra Dapolito Dunn

January 31, 2011

The Honorable Lisa Jackson
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The Honorable Pete Silva
Assistant Administrator for Water
U.S. Environmental Protection Agency
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Washington, DC 20460

Re: Executive Order 13132 Input on Federal Stormwater Rulemaking

Dear Administrator Jackson:

The Association of State and Interstate Water Pollution Control Administrators (ASIWPCA) is pleased to provide the following input under Executive Order (EO) 13132 on *Federalism* consultations to the Environmental Protection Agency (EPA or Agency) regarding the upcoming Clean Water Act (CWA) stormwater rulemaking. Celebrating its 50th Anniversary this year, ASIWPCA is the national voice of state, interstate, and territorial officials responsible for implementation of programs that protect surface waters across the nation – including the stormwater program. We appreciate the opportunity to provide perspectives of the state and interstate regulators (collectively referred to in these comments as states) to the Agency while you are in the early stages of rulemaking.


The states support modification and refinement of the federal stormwater program to improve its effectiveness. Meaningful water quality improvement can be achieved with greater control of stormwater runoff from its many sources. The important water quality gains that can be achieved through improved stormwater control will require meaningful state resources to permit, inspect, monitor, and enforce new requirements, and to coordinate with nonpoint sectors. EPA must work with states as full partners in this rulemaking process so that modifications to the stormwater program yield the greatest environmental and water quality benefits for the corresponding financial and human capital investment. EPA must also make every effort to work with the states, across the

federal government, and with other stakeholders to reduce stormwater pollution from sources not covered by the CWA's permitting program.

States feel strongly about the stormwater program, and in particular, recommend the EPA spend even more time speaking with states about their experiences managing stormwater in different climates and regions across the nation. This letter represents our initial effort to identify and advance to EPA suggested improvements and enhancements for the stormwater program, within the time period requested by the Agency under the EO. **Due to the importance of state perspectives on the national stormwater program's reform, and the value of state experience in the field managing stormwater, ASIWPCA calls on EPA to hold robust and focused national and regional outreach session efforts to gather additional state input, which will be critical to the success of this effort.**

Executive Summary

Stormwater runoff, precipitation washing over the landscape, remains a leading source of water quality impairment nationwide. States support EPA's desire to improve and enhance stormwater program capacity. However, the time has come for EPA to seriously consider regulating precipitation-driven discharges in a fundamentally different way than traditional, end of pipe, process wastewater point source discharges. EPA also must design a program which balances the need for some national consistency with essential state flexibility to manage stormwater in the most effective way possible. ASIWPCA provides the following summary of recommendations:

- EPA must engage the states in a meaningful consultation process to incorporate their on-the-ground experiences in regulating precipitation-driven discharges.
- EPA needs to separate the §402 program into two categories: precipitation-driven discharges and traditional process wastewater, end of pipe discharges. This will allow new and current regulations for stormwater to be clear and appropriate through stormwater-specific language.
-  Precipitation-driven discharge regulations within NPDES should recognize BMPs, where selected as the most appropriate and protective control by the permitting authority, and designed, installed, and maintained to specified standards, as fully meeting permit requirements.
- EPA must allow prioritization and risk-based evaluation of precipitation-driven discharges, given the wide spectrum of sources, challenging logistics, and significant costs associated with stormwater treatment and retrofits.
- EPA must lead a federal agency effort to develop a stormwater strategy for lands in production, which generally fall outside the NPDES program.

- EPA must work with the U.S. Department of Agriculture, and call upon Congress, to ensure that the next Farm Bill directs funds to impaired waters and builds programs to reduce stormwater from agricultural activities.
- New development requirements must distinguish between a “goal” of natural hydrology and an enforceable “performance standard” which is constrained by feasibility, practicability, and the present landscape.
- Redevelopment performance standards must protect threatened waters and promote restoration of impaired waters, but not incentivize urban sprawl.
- The Retrofit Program and Chesapeake Bay specific requirements both should be proposed in separate rulemakings.
- EPA must call upon Congress to significantly increase federal funding (e.g., §106, §319) for states to implement the stormwater program’s new features.

I. Background

Regulating stormwater runoff is a complex challenge for state and local water quality programs. Pollution carried by precipitation continues to be a leading contributor to watershed impairments nationwide. In addition to carrying chemical and/or bacterial contaminants, stormwater poses a physical hazard to aquatic habitats and stream function by changing flow velocity and volume. Urbanization and rural development changes the physical, chemical, and biological conditions of our waterways. Clearing removes vegetation that would otherwise intercept, slow, and return rainfall to the air through evaporation and transpiration. Grading flattens hilly terrain and fills in natural depressions that formally slowed and provided temporary storage for rainfall. Urbanization scrapes and removes topsoil and sponge-like layers of humus and compacts the remaining subsoil. Increasing acres of impervious surface nationwide further reduces infiltration and increases runoff.

We acknowledge criticisms of the current stormwater program, such as:

- Insufficient resources to monitor, assess, and develop adequate stormwater permits, review stormwater plans, inspect facilities, provide compliance assistance, pursue enforcement, and carry out adaptive management.
- Disconnects between the standards, monitoring and assessment, TMDL, watershed protection, and NPDES programs.
- Inadequate consideration of stormwater runoff at the local land use level.
- The need for more research on the effectiveness of surrogates (e.g., impervious cover) to characterize both water quality and quantity effects of stormwater, and to incorporate response variables (e.g., aquatic life use support) into surrogates.

- A traditional pollutant and parameter specific approach stymies innovation.
- Insufficient consideration of the cumulative effects of stormwater in a watershed.
- Challenges relating stormwater monitoring data to water quality standards, human health risk, or environmental risk.
- Questionable effectiveness of some stormwater management plans, stormwater pollution prevention plans, and BMPs.

II. State Suggestions Beyond EPA's Current Vision

As a fundamental matter, we recommend that EPA take the stormwater rulemaking in an entirely different direction. This Section outlines our recommendations in some detail.

A New Program Designed for Precipitation Driven Discharges

ASIWPCA and its state/interstate members are proud of the significant reductions in water pollution yielded by the National Pollutant Discharge Elimination System (NPDES) program since its establishment. The program continues to thrive, although we are concerned that it will be compromised by the addition of more and more sources to permit, as federal funding to support the program declines. A strong federal/state partnership, good data, adequate and sustainable funding, clear performance standards, and prioritization are at the heart of this program. It flourished with its focus on predictable and manageable flows, identifiable end-of-pipe controls, extensive effluent monitoring, and substantial federal and state funding for treatment facilities. The greatest successes occur where the operator of the discharging facility maintains control over the influent and effluent. Applying this successful program to a very different source of pollution – stormwater – has not yielded the same level of progress. Using a traditional, end of pipe regulatory framework for precipitation-driven discharges has led to litigation and uncertainty.¹

It is time for regulatory requirements designed specifically for precipitation-driven discharges. Cost effective, environmentally sound, and sustainable stormwater management is possible when the realities of stormwater science are acknowledged, and the “point source” NPDES regulatory framework is reworked to include this science. The future of stormwater regulation begs for creativity, innovation, and full collaboration between the federal and state governments.

ASIWPCA recommends that EPA make regulatory changes to divide the § 402 program into two categories: precipitation-driven discharges and traditional process wastewater, end-of-pipe discharges. This will allow new and current regulations for stormwater to be clear and appropriate through stormwater-specific language. The new and revised precipitation-driven discharge regulations can be built around the unpredictability of stormwater, and recognize that BMPs, where selected as the most appropriate and protective control by the permitting authority, when designed, installed, and maintained to specified standards, fully meet permit

¹ See, e.g., *NEDC v. Brown*, No. 07-35266 (9th Cir. 2010) (finding forest road runoff to be a point source).

requirements.² These stormwater regulations can support and foster regional and state-specific approaches that account for differences in precipitation frequency and amount, climate, topography, soil, and development patterns. Where waters are impaired under the CWA, these new regulations can promote adaptive management and timeframes to implement retrofits. Fairness can be promoted among states, communities, existing and new development, and between process wastewater discharges and precipitation-driven discharges.

Residual Designation Authority

Federal regulations provide that the EPA Regional Administrator/State Program Director may designate additional stormwater discharges as requiring NPDES permits. The authority to regulate other sources based on stormwater's localized adverse impact on water quality through NPDES permits is commonly referred to as the Residual Designation Authority (RDA). Federal regulations provide that any person may petition either EPA or the affected state to residually designate discharges as requiring a stormwater permit.

ASIWPCA recommends that EPA take this rulemaking opportunity to clarify where/when it is appropriate for states to exercise RDA. Clarification could also include establishing requirements for petitions, including the appropriate data needed to present a case, as well as how RDA can best be integrated into the TMDL and antidegradation programs. Without such clarity, any impaired watershed in the nation is subject to a petition for designation. The current lack of clarity creates a significant administrative burden on the permitting authority, may result in a non-prioritized use of state resources on remediation or in litigation, and may place unnecessary costs on the regulated community without sufficient environmental gains.

Permitting in Impaired Waters

EPA should reconsider how precipitation driven impairments are addressed and redevelop the NPDES permitting approach to stormwater impaired waters. Current NPDES requirements for impaired waters potentially impede watershed solutions. Watersheds impaired by multiple stormwater discharges do not necessarily require the same level of treatment across each discharge. Permitting requirements, such as 122.4(i), and "cause or contribute" language in RDA, can unnecessarily focus resources on individual discharges and costly offset programs. EPA must consider and recognize state approaches. Where waters are either impaired or threatened primarily by nonpoint sources, a watershed plan may be a better control strategy than TMDLs mixed with weakly supported effluent limits for precipitation-driven discharges.

Some states have found the most cost effective and environmentally beneficial strategies are deployment of BMPs at strategic locations within a watershed, then funded and maintained by a watershed utility district where all property owners in the watershed contribute. Watershed solutions that cut across several properties are sometimes more effective than addressing individual dischargers. Successful retrofitting efforts are usually of a regional or watershed scope.

² Numeric limits can be an important tool in developing protective permits and EPA should also allow and support the use of BMP-based effluent limits when appropriate for a specific discharge.

Prioritization is a Tool

EPA must use this rulemaking opportunity to include prioritization and risk-based evaluation to focus stormwater permitting, inspection, compliance assurance, and enforcement resources. Prioritization is becoming more and more important due to the high cost of many stormwater solutions.³ One approach might be to identify stressors on a watershed level (e.g., urban runoff, agricultural runoff, runoff from back roads, point sources), allowing states and municipalities to target stormwater tools and funding to resolve or prevent problems. BMP deployment at the MS4 level can also be prioritized through a rule. Prioritization can help MS4s determine where and when retrofits are implemented.

State Stormwater Management Programs

State stormwater management programs showcase the importance of watershed specific solutions and local land use decision making to achieve success.⁴ State authority for these programs generally exceeds that of the federal government and has evolved based on local, not national, priorities. Many of these programs are the result of a federal mandate under § 6217 of the Coastal Zone Act Reauthorization Amendments.⁵ Congress also highlighted the importance of these state programs under CWA § 402(p)(6).⁶

EPA must defer to existing, successful state and/or local post construction stormwater that meet or exceed any new federal requirements. EPA seems overly focused on expanding the federal program, rather than supporting good state efforts. Any national stormwater rule also must recognize an equivalent state program/performance standard.

Funding for Non-Point Programs

ASIWPCA recommends EPA focus more resources on improving the nonpoint source program to address stormwater impairments, in conjunction with its efforts to update CWA § 402. The 2008 Clean Water Needs Survey identified over \$22 billion in nonpoint source program funding needs across the 50 states⁷. Over the last five years, the annual appropriation for CWA § 319 has been approximately \$200 million. Current § 319 funding is insufficient to run comprehensive nonpoint source programs. ASIWPCA has previously recommended that EPA request at least \$1 billion for § 319 to support state programs dedicated to stormwater and nonpoint source program issues. An increase in § 319 funding would allow EPA narrow the NPDES stormwater universe and make more watershed projects available for CWA § 319 funding (or in the alternative allow NPDES stormwater areas to be

³ For example, the Eagleville Brook Impervious Cover TMDL will cost \$7.8 million, roughly \$95,000 per acre of impervious cover treated (<http://clear.uconn.edu/projects/tmdl/progress.htm>)

⁴ State Stormwater Management Programs – Florida (1979), Maryland (1984), Virginia (1990), Delaware (1991), South Carolina (1992), Massachusetts (1998), Rhode Island (2002), Wisconsin (2002), New Jersey (2003), Michigan (2007), Minnesota (2008).

⁵ § 6217, better known as the *Coastal Nonpoint Source Pollution Control Program* is intended to address nonpoint pollution problems in coastal water and is a requirement for the states and territories with approved Coastal Zone Management Programs.

⁶ CWA § 402(p)(6) Regulations

Not later than October 1, 1993, the Administrator, in consultation with State and local officials, shall issue regulations (based on the results of the studies conducted under paragraph (5)) which designate stormwater discharges, other than those discharges described in paragraph (2), to be regulated to protect water quality and shall establish a comprehensive program to regulate such designated sources. The program shall, at a minimum,

(A) establish priorities,

(B) establish requirements for State stormwater management programs, and

(C) establish expeditious deadlines.

The program may include performance standards, guidelines, guidance, and management practices and treatment requirements, as appropriate.

⁷ <http://water.epa.gov/scitech/datait/databases/cwns/2008reportdata.cfm>

eligible for § 319 funding). The time is right to find ways to use § 319 funds to solve more stormwater problems.

EPA & Lands in Production

In many states, agriculture and forestry are the dominant land uses, and except for certain animal operations, these discharges are exempt from pollution control requirements. These areas may contribute significant pollutant loads but are outside the control authority of state stormwater programs. Farm policy, incentives, and conservation programs have mixed success in protecting water quality. It is time to reconsider these factors in light of what is now known about the relationship of land use to water quality and quantity. This effort will also have the corresponding benefit of protecting forests and farms from opportunistic land use change, often promoted by government at public expense, such as where we build roads, plan industrial parks, and develop communities.

We urge EPA to promote comprehensive and transparent coordination across all programs that impact water quality, so that resources delivered to those areas produce the greatest impact. USDA Farm Bill funding must prioritize local water quality as an aspect of decision making. EQIP (Environmental Quality Incentives Program) and CRP (Conservation Reserve Program) funds should consider high quality and impaired waters. EPA should work with USDA to use CWA § 319 criteria to direct Farm Bill funds.

Likewise, EPA should take the federal agency lead in developing clear national objectives for controlling stormwater pollution from lands in production (i.e., working lands associated with food, feed, fiber, fuel, and forestry industries). While states do not support expanding the federal NPDES universe to cover these sorts of facilities, there is great support for collaboration of policies designed to reduce and control stormwater pollution. Working with other federal agencies, EPA should lead the effort to develop a national stormwater strategy that takes advantage of existing voluntary programs to the highest extent possible, and proposes new programs that would assist in implementation of national water quality goals.

III. Comments on EPA's Stormwater Rule Options

1. General Comments

While we greatly appreciate EPA's willingness to conduct conference calls with the states, these calls have yet to provide the full view of EPA's direction and activities. Accordingly, these comments represent our opening thoughts on stormwater management and preliminary ideas for refocusing the NPDES program to enhance stormwater management in the coming decades. We include references to EPA's PowerPoint presentation delivered on December 9, 2010 during the EO 13,132 briefing as appropriate.⁸

The federal regulations should include a clear definition of success that looks at indicators of BMP implementation, not just estimates of pollutant loading, which are often not feasible for precipitation-driven discharges. Likewise, a couple of states do have existing requirements that are tied to pollutant removal percentages. EPA needs to be prepared

⁸ EPA Federal Consultation Meeting, *Stormwater Rulemaking Consultation with State and Local Governments*, 12/9/2010.

to address how conversion to a hydrology standard will be handled and be prepared to allow flexibility and time to make adjustments. Any national approach must acknowledge the reality of the frequency and duration of precipitation events in some western states.

The MS4 regulations need to acknowledge that remediation of waters impaired by stormwater discharges will take time, possibly 10-20+ years, and in some cases may not be practical at all. The MS4 program should be written to incentivize the retrofitting of existing impervious surfaces on the basis of a long-term plan and funding should be available for development of these plans. The national stormwater rule must include recognition of an equivalent state program / performance standard.

While a single set of consistent requirements for all MS4s may simplify enforcement, it fails to take into account the inherent differences between the Phase I and Phase II systems. Accordingly, the six minimum control measures (MCMs) should not be flatly applied to Phase I MS4s retroactively. Use of the MCMs should only be integrated into a permit after careful consideration of appropriateness of need. Unilaterally changing the requirements for Phase I MS4s may adversely impact some programs.

Several states believe an MS4 "lite" program for smaller municipalities/towns would be of value. EPA may wish to consider such a program.

2. Expansion of the Stormwater Program Universe

Simply expanding the federal program will not provide an optimal solution to the growing stormwater pollution issue. Given the options offered by EPA, states exhibited a clear preference for extending permit coverage to the jurisdictional boundaries of the MS4.⁹ Municipalities manage several different programs throughout their jurisdiction and this appears to be the most reasonable approach to such expansion. Drawing arbitrary lines at urbanized area boundaries creates an impression of inequality. For example, if two parcels are on opposite sides of a road, and one is in the urban area and one is out, but they are both in the same watershed, there is no logic in extending program jurisdiction to only one of the parcels. In addition, permitting urbanized areas fails to cover areas where development is occurring and post-construction requirements are most appropriate, but focuses on areas already developed. Many municipalities are already implementing the program based on their municipal boundaries. Almost all States agreed that the other options were not only infeasible but would likely introduce unintended impacts. At least one state expressed a clear preference for defining MS4s by their watershed, noting that stormwater issues are not confined to political boundaries. States should continue to have the flexibility to designate additional MS4s as deemed appropriate by the state.

⁹ Id. slide 21.

3. Performance Standards for New Development

When it comes to new development, EPA must clearly distinguish between “goals” and “performance standards”.¹⁰ The ultimate goal for the stormwater program may be to attempt post-development stormwater hydrologic conditions that approximate and/or mimic the pre-development conditions, however typically this is not achievable. Existing stormwater BMP technology simply does not allow this goal to be met on a consistent basis in all locations. Similarly, with pre- and post-development, volume requirements can be very difficult to achieve where infiltration (retention) BMPs are ineffective due to natural hydrology, topography, geologic features, soil type, or other factors. In addition, in some states water quantity and drainage laws may preclude such retention.

Most states do not support mandating specific numeric effluent limits based on criteria that may exist in a federal rule.¹¹ We recommend requirements based on design standards that allow flexibility to address the practicality of implementation. When combined with existing post-construction treatment requirements, this approach balances environmental protection and the needs of public and private development. A numeric limit would likely not be feasible for most MS4 systems, and not legally required.¹² A federal rule must avoid being highly prescriptive and provide states with flexibility on meeting a performance standard.

EPA must also consider ongoing maintenance issues associated with facilities. Identification of the responsible party is not always easy or obvious in some States. States support the use of offsets, mitigation, exceptions, and variances as deemed appropriate by the permitting authority, where cost and complexity can be considered as part of the options.¹³

States recommend that EPA refine many of the terms used in the agency’s materials provided for this consultation effort.

4. Performance Standards for Redevelopment

EPA should not be highly prescriptive with respect to redevelopment and stormwater treatment, but allow states flexibility in meeting the standard and developing regionally appropriate variances¹⁴. This stormwater regulation must be protective of threatened waters and promote restoration of impaired waters, but it should also encourage redevelopment to reduce urban sprawl and must avoid becoming the disincentive for this investment. The goal should be to encourage developers to utilize these sites in preference over undeveloped sites. Several states have developed performance standards that reduce the requirements for redevelopment. Others have found that redevelopment post construction stormwater requirements are very effective in achieving water quality goals at the site level. ASIWPCA recommends that EPA let each state set

¹⁰ Id. slide 22.

¹¹ Id. slide 23.

¹² *Defenders of Wildlife et al v. Browner*, 191 F.3d 1159 (9th Cir. 1999)

¹³ EPA Federal Consultation Meeting, slide 24.

¹⁴ Id. slide 27 (e.g., does “establish specific numeric standards” mean new water quality standards, effluent guidelines, performance standards, or something else?)

and/or retain its own standard.¹⁵ We also support giving credits for redevelopment in certain areas (e.g., brownfields).

5. Performance Standards for Retrofits

ASIWPCA believes this aspect of the rule will garner the most attention from municipalities, Congress, and the public. Regardless of the scope of application, retrofits will be enormously expensive for those affected¹⁶. The cost will likely go beyond simple dollars and cents. Politically, we believe it will be very difficult, if not impossible, to move the stormwater rule forward with retrofit requirements included. States recommend either a separate rulemaking or a guidance document to address retrofits.

Should EPA propose retrofit requirements, ASIWPCA recommends they be focused on MS4s discharging to water bodies impaired by stormwater.¹⁷ In states that are seeing success, retrofitting goes beyond implementation of BMPs and includes regional facilities that address a specific resource (e.g., impaired water/TMDL or flooding issue). Retrofitting serves many needs and has numerous drivers. Retrofit standards must be flexible as it relates to the required timeframes for implementation. Implementation will require the establishment of a funding mechanism, such as a stormwater utility. This is not a simple task and will likely take a community a minimum of two years to put in place.¹⁸

6. Chesapeake Bay Specific Requirements

EPA should propose any Chesapeake Bay specific requirements in a separate rule making.¹⁹ While there is concern over what will be required differently in the Chesapeake Bay watershed versus the rest of the country, separation of the two rules is appropriate and would help reduce the size of the national stormwater rules.

Application of the Chesapeake Bay provisions may be unnecessary in other sensitive watersheds that are much smaller in scope. Many states are already addressing sensitive watersheds and are seeing success. A national approach that is inconsistent with the state's current approach could undermine those successes.

7. Industrial Program

Several states support replacing the SIC code system with the NAICS system to modernize the identification of industrial discharges covered by NPDES stormwater regulations is appropriate²⁰. Many states believe a phased in approach which utilizes a cross-referencing table would be necessary. EPA should be very careful with the replacement of the SIC code system to avoid unintentional expansion of the NPDES

¹⁵ A percent reduction in runoff volume may be easier to monitor and more representative of impact than impervious cover measurements.

¹⁶ Examples for nutrient reduction retrofits in Florida - Seminole County, FL (\$7.8 million), Martin County (\$6.8 million), Lake County, FL (\$7.4 million), South Daytona, FL (\$4.4 million), Sarasota, FL (\$16.8 million).

¹⁷ EPA Federal Consultation Meeting, slide 29.

¹⁸ For example, the creation of the Long Creek Watershed Management District in Maine was formed after a 2-year stakeholder process and then a third year of working out details. In the case of watersheds with multiple jurisdictions, this task becomes even more complicated. There will be many places where even a ten year target is overly aggressive, and should be assessed on a watershed by watershed basis. It may make sense to divide retrofitting into 2 phases, Phase 1: Planning (2-3 years) and Phase 2: Implementation (10-20 years).

¹⁹ Id. slide 31.

²⁰ Id. slide 32.

universe. Other states believe this SIC code update would create unnecessary confusion for regulated industries and thus cannot support this proposed change. However, these states have pointed out that there has been a problem with the SIC listings creating an uneven playing field where similar activities are treated differently. For example, construction companies performing heavy equipment maintenance are not subject to regulation based on the applicable SIC, even though a number of other industries are subject to regulation because of this activity.

8. Other Topics

Monitoring Requirements

X States have strong concerns about how EPA establishes monitoring requirements in this rule. Monitoring requirements for stormwater must be robust enough to ensure the data is useful and the collection costs are proportionate to the applicability for water quality. The window of opportunity for obtaining representative samples is very narrow and can vary due to a number of factors, including prior weather conditions and size of drainage area. At least one state has concluded that stormwater monitoring requirements may not be worth the cost/effort. Instead, this state has replaced the monitoring requirement with an inspection program funded by fees charged to the regulated facility. The state was able to garner industry support for these fees by eliminating the monitoring requirement, which has resulted in a greater field presence and cooperation from facility operators.

States have significant experience in stormwater monitoring and highly recommend further dialogue on the option/issues, prior to EPA moving too far down any one path in this rulemaking. While states agree there must be some method of assessing the effectiveness of the program, there are many different assessment approaches that can lead to success and should be considered.

General Permits

One basic NPDES tool that facilitates a comprehensive and efficient process for addressing a category of similar discharges is the "general permit". General permits contain specific limitations or requirements that apply to all facilities involved in similar operations that can be adequately regulated with a standard set of conditions. As EPA develops and updates the stormwater rules, ASIWPCA recommends a significant focus on maximizing use of the general permit to adequately manage this universe. EPA's should avoid issuing clarification preamble language/guidance that undermines general permit usage.

Rural Areas

EPA should consider providing states with flexibility on how this rule will apply to rural areas. For example, a state may have a facility with a large impervious area (e.g. large parking lot at a truck stop or box store), which could have a low risk of environmental harm. The rule must be able to accommodate the differences between densely populated urban corridors and more rural communities with lower risk, even as both areas might meet an impervious area size threshold. Specifically, we recommend that EPA take an approach similar to 40 CFR 123.35 where it is left to the permitting authority to develop

the process and criteria. This flexible approach better fits the diversity of situations, climate, urban density, and forms of government which different states deal.

Low Impact Development and Green Infrastructure

ASIWPCA supports EPA encouraging low impact development with incentives, but recommends that EPA not mandate design requirements or limits on impervious cover. States and local government are in the best position to determine which requirements are most appropriate. Low impact development projects can lead to long term operation and maintenance issues if not adequately supported and managed.

Utilization of green infrastructure as part of stormwater management can be cost-effective, sustainable, and environmentally friendly. Green Infrastructure can enhance and/or mimic the natural hydrologic cycle processes of infiltration, evapotranspiration, and reuse. At the largest scale, the preservation and restoration of natural landscape features including forests, wetlands, and floodplains, can be critical components. Likewise, green infrastructure may include smaller scale technologies including green roofs, individual trees and tree boxes, rain gardens, vegetated swales, pocket wetlands, infiltration planters, porous and permeable pavements, vegetated median strips, riparian buffers, and so forth. While states would not support a federal mandate for green infrastructure use, ASIWPCA recommends that EPA continue to:

- Develop models for all components of green infrastructure and make them available nationwide.
- Explore and highlight opportunities and incentives for green infrastructure provisions in MS4 permits and CSO Long Term Control Plans (LTCPs).
- Further develop materials to assist permit writers, inspectors, and TMDL developers on the appropriate uses of green infrastructure under the CWA.
- Identify the most effective and innovative uses of green infrastructure through EPA awards or recognition programs.
- Provide technical assistance, training, and outreach to potential users of green infrastructure, including states, cities, counties, utilities, environmental and public health agencies, engineers, architects, landscape architects, planners, realtors, and nongovernmental organizations.
- Develop tools to assist local green infrastructure programs with outreach, training, application, planning and design, monitoring, and plan review.
- Provide the appropriate flexibility so states and cities can tailor solutions and take advantage of the benefits of green infrastructure in a way that best meets their needs.

Linear Projects

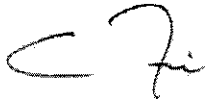
To the extent that EPA is considering stormwater control for linear projects, including transportation facilities, it is important to note that they may not have the same opportunities to treat stormwater or promote infiltration as do other non-linear facilities. States support the development of a specific customized stormwater standard for linear projects. However, some states may not have authority to enforce a standard, as the jurisdiction, ownership, and program management may not align with state law.

IV. Conclusion

States fully support stormwater management and improvements to the federal program. ASIWPCA urges EPA to consider the significant benefit of regulating precipitation-driven discharges in a fundamentally different way than traditional point sources. Such a thoughtful step forward will require careful adjustment of the current regulatory structure. ASIWPCA encourages EPA to fully engage states in this process and to draw on our extensive experience regulating precipitation-driven discharges.

We look forward to our continued discussions with the Agency. Please contact ASIWPCA's Deputy Director Sean Rolland at s.rolland@asiwpc.org or 202-465-7179 to discuss next steps.

Sincerely yours,



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November 9, 2010

Assistant Administrator Peter Silva
Deputy Assistant Administrator Nancy Stoner
U.S. Environmental Protection Agency
Office of Water
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460-0001

Re: Comments on Coming Together for Clean Water

Dear Assistant Administrator Silva and Deputy Assistant Administrator Stoner:

The Association of State and Interstate Water Pollution Control Administrators (ASIWPCA) appreciated the opportunity to offer verbal comment on the EPA "Coming Together for Clean Water: EPA's Strategy for Achieving Clean Water" (hereinafter CTFCW or the strategy) during the U.S. EPA conference call with ASIWPCA and the Environmental Council of the States (ECOS) on Thursday October 21, 2010. During the call, the following state agency officials representing ASIWPCA provided feedback on various topics:

- The State/EPA Relationship – ASIWPCA Vice President Walt Baker, Director of Water Quality, Utah Department of Environmental Quality, Utah Department of Environmental Quality
- Monitoring & Assessment: Building State Capacity – ASIWPCA Past President Ellen Gilinsky, Director, Water Division, Virginia Department of Environmental Quality
- Interim Measures of Progress: Pollution Reduction and Tracking – ASIWPCA Co-Chair Interim Measures Committee, Tom Stiles, Chief, Watershed Planning, Kansas Department of Health & Environment
- CWA Action Plan – Co-Chair ASIWPCA OECA Enforcement Committee, Dave Akers, Clean Water Facilities Program Manager, Colorado Department of Public Health & Environment
- Wet Weather Issues – ASIWPCA Co-chair of Permitting and Compliance Task Force and Region 1 Board Representative Pete LaFlamme, Director, Water Quality Division, Vermont Department of Environmental Conservation

In an effort to assist the Agency as it proceeds to finalize CTFCW, we provide below written comments from these individuals on behalf of ASIWPCA.

The State/EPA Relationship


ASIWPCA appreciates the opportunity for a dialogue with EPA on CTFCW. ASIWPCA offers eight specific recommendations that we feel will help lead to its success:

1. **Priorities:** EPA's mission is to protect human health and to safeguard the natural environment. As states, we share that mission. Unless CTFCW or any new initiative helps us accomplish our joint mission, we should not allow limited resources to be diverted and attention distracted.
2. **Collaboration:** We strongly encourage ongoing collaboration between EPA and the states. There are excellent examples of this: The Nutrient Innovations Task Group; the Clean Water Action Plan; the SRF Work Group; ARRA funding; and the Water Quality Standards Work Group. There are also examples where we have not been successful: ICIS/Ride; pesticides; and the Spill Prevention Control and Countermeasure program.

The delegated states are the delivery system for nearly every element of the Federal water quality program. We are the boots in the field and the ties to the local water quality efforts, from wet-weather activities to watershed efforts. If CTFCW is to be successful, it will depend on the level of communication and collaboration between EPA and the states.

3. **Assessment and Monitoring:** EPA must help build capacity in the states' water quality monitoring and assessment programs. We need to jointly craft national and state monitoring and assessment priorities, including enhancing data exchanges among agencies and coming to agreement on duration and frequency of criteria violations, so that we do not devote resources to developing unnecessary Total Maximum Daily Loads (TMDLs).
4. **Nutrients:** We agree that EPA must hold states accountable for developing numeric nutrient criteria or embracing another acceptable approach. Whatever the approach, we must ultimately work towards nutrient load reductions. An effective national nutrient strategy will require alignment of the Federal Clean Water Act and the Farm Bill. As of yet, little success has been achieved in this area.
5. **Watershed Approach:** The shortcoming in our approach is not that we have lacked a watershed vision. Nor do we disagree on what the main elements of an effective watershed approach should be. We simply need to energize, focus, and sustain the effort, which includes funding, developing measurable objectives - the achievement of which will mark our progress and result in water quality improvement, and providing for flexibility in our approach.
6. **Non-point Source (NPS) Pollution:** The current approach to managing NPS pollution has been largely a failure. If resources matched the magnitude of the problem, and the CWA provided more NPS authority, perhaps we would have achieved greater success thus far. Unfortunately, that is not our reality. However, there are things we can do:
 - Target the strategic and expanded use of 319 funds. It may not be in funding projects but in building capacity within a local watershed organization.
 - Accountability: Measure success in terms of results rather than activity.
 - Nationally promote and share best management practices (BMPs).

- Education: Engage the public and stakeholders to a much greater degree. Increased awareness will lead to changed social behavior and a sense of stewardship that facilitates sustained water quality improvements.

7.  **NPDES and Wet Weather:** (see also below, Wet Weather Issues). Avoid wet weather initiatives which embrace a "one-size fits all" mentality. For example, Utah is the second driest state in the nation. Utah has no Combined Sewer Overflows (CSO) and Sanitary Sewer Overflows (SSO) are mostly inconsequential. Requiring Utah to perform inspections, make reports, enter data, and be subject to even moderate EPA oversight in this area is an inefficient use of resources. Instead, focus should be on areas where states and EPA can do the most good. This includes taking a risk-based approach in managing the National Pollutant Discharge Elimination System (NPDES) program, which will allow a shift in resource allocation from areas where we see little benefit to those where we can realize significant benefits.

8. **Program Integration:** We will reap greater rewards from better integration of the permitting, TMDL, and water quality standards activities. For too long these programs have operated in stove pipes that have impeded progress.

Monitoring, Standards & Assessment: Building State Capacity

ASIWPCA could not agree more with the statement that we must know what we have, in order to know what we have to do, and to be able to measure our success in doing it. A robust monitoring and assessment program is critical. We need a plan that builds from waterbodies, to watersheds, to the regional level and finally to a national picture, to achieve this goal.

The concept of the National Aquatic Resource Surveys (NARS) was a great step in this direction – but NARS faltered in creating a new and different monitoring structure rather than building on the more detailed and sound foundation already in place in the states. Presently NARS, unlike state surveys which include both targeted as well as random monitoring, cannot tell us what is broken in a watershed in specific enough terms to fix it.

States have been engaging EPA in this discussion for several years – it seems an appropriate time in the partnership for EPA to implement some of the recommendations that have emerged from this dialogue. There is no need to remind EPA of the controversy over tying the use of probabilistic monitoring by the states to their monitoring funding. It is discouraging that to date the funding formula for state scale surveys has not been changed to reflect what we understood from the Agency – that this approach had been abandoned.

We applaud the formation of the Monitoring and Assessment Partnership (MAP). This group has been meeting productively for over a year. MAP has made several recommendations for changes to the program. We are unsure whether these changes have been accepted by the Office of Water's high level management.

For example, MAP recommended that the NARS survey design be redone to yield information that could be used at the state as well as the national level. MAP also recommended a relook at regional assessment methodologies and for the EPA Office of Science & Technology (OST) to approve the changes. We do not know what has happened to these recommendations.

CTFCW recognizes the importance of monitoring and assessment. It is clearly part of the holistic water framework. Many ideas have been vetted at the program level to improve the process – this seems to be an appropriate time to elevate and implement these ideas as part of EPA's overall strategy for achieving clean water.

Interim Measures of Progress (IM): Pollution Reduction & Tracking

The IM exercise has been a tremendous joint effort between states, regions and EPA Headquarters. IM are increasingly necessary given that today's trek toward water quality standard attainment is long and tortuous.

IM fulfill a need within the context of EPA's "Impaired Waters Pipeline," providing some means to assess progress in planning beyond TMDL development, implementation of those TMDLs (or alternative plans), and improvements in water quality resulting from implementation. Additionally, the notion of holding the line and maintaining water quality in the face of continued stress pressure on watersheds is an interim step toward fulfilling the protection mission of the CWA.

Furthermore, IM are necessary because wet weather management and controlling non-point sources are vexing on the large scale of watersheds. Management through financial incentives or regulation is equally challenged by the large extent of pollutant contribution across the landscape, urban or rural.

Thus, IM fill the gap between impairment and water quality standard attainment, making imposition of new quantified criteria not necessarily beneficial in appraising success. For an issue such as nutrients, load reductions and corresponding biological conditions are appropriate metrics to determine our status.

IMs are not milestones, particularly as conceived in the Chesapeake Bay initiative. IMs are feedback loops of information to allow the water quality managers to adjust their implementation strategies. "Milestones" now connote consequences if not met. In contrast, IMs are part and parcel of adaptive management where milestones tend to be punitive.

Regarding EPA's Healthy Watershed Initiative (HWI), many states are eager to discover such watersheds and get credit for protecting them. Hence, a "maintaining/protection" IM is being developed. However, restoration of waters still comprises the bulk of state action. HWI should not distract from the task at hand to return waters to good quality, as some monitoring initiatives for 305(b) have done to the 303(d) process.

Implicit in the development of IMs is the acknowledgement that solving today's impairment problems is much more complex than in the past. We can make a dent in the problem, but need time, money, and widespread participation to reach the end of the "pipeline." IMs also provide us with a means to gauge this progress.

CWA Action Plan

ASIWPCA greatly appreciated EPA's work with the states in the development of the Clean Water Action Plan proposals. We particularly acknowledge the hard work by EPA staff and the collaborative approach taken by EPA leads David Hindin and Kate Anderson.

With the emergence of possible new approaches we are turning our thoughts from development to implementation. In this regard, the success of the new paradigm will depend on continuing our collaborative working relationship and to keeping lines of communication wide open between EPA headquarters and ASIWPCA, and between individual states and EPA regions.

Often following a flurry of activity around a new initiative, there is a tendency to gravitate away from change and back toward business as usual. We must resist this temptation and commit, at all levels, to the core of the Action Plan. That is, regions and states working together to establish common priorities and goals and to deploy our resources using the right new approaches to achieve the best outcomes. Many, if not all of us, who worked on developing the proposals for the Action Plan were excited by the prospect of change focused more specifically on addressing real water quality problems. There are thousands of others in states and regions that did not follow the process closely, and for whom this change will be outside of their comfort zone.

ASIWPCA is committed to seeing this process through and finds many of the new approaches to have the promise of very positive change. The challenge is going to be thinking of ways that those of us closest to the plan can bring others along. It would be nice to think that this will be easy but we know it will not be. Success requires developing common messages and themes and working with great patience and constant communication to change our ingrained culture. ASIWPCA is eager to work with EPA to develop approaches that states and regions can use to make measurable progress.

Additional specific thoughts:

1. Reflecting on the Utah wet weather example, states and regions should not be expected to implement all of the new approaches. The approaches are tools to be used as appropriate and are not a means to an end, per se. States and regions should be free to select approaches that will best achieve positive water quality outcomes in the priority areas they have selected.
2. The Interim Guidance provides basic direction for states and regions to move into the new paradigm, but they will need more specific direction, tools, and assistance to be able to develop meaningful agreements as contemplated. Although the guidance is fairly succinct, adequate incorporation of all of the items contemplated for the work plan is a tall order.

With that, we are pleased to be at this point and we look forward to working with EPA to flesh out implementation strategies as the final plan emerges.

Wet Weather Issues

While this discussion focuses on the area currently referred to variously as stormwater runoff/wet weather condition/non-point source/MS4/MSGP/CAFO/Construction/post-construction discharges but in reality falls under the umbrella of "precipitation driven discharges."

We have turned our focus to precipitation driven discharges because of the following:

1. **Past Successes** – Over forty years of improvements and successes that were built upon a strong federal/state partnership; sound science; adequate and sustainable funding; clear performance standards; and prioritization of actions.

In 2004, ASIWPCA noted “[t]he NPDES program has achieved significant reductions in pollutant discharges since it was established in 1972, and has resulted in tremendous improvements to the water quality...” We noted “[f]or most states there is relatively little overall gain in water quality left to be realized by further controlling and limiting conventional pollutants from point sources. Yet, the NPDES program remains at the center of debates about the solutions to pollution, petitions for cleaner water, and lawsuits over how the program is implemented. ASIWPCA and its membership are extremely proud of everything the NPDES program has accomplished over the years through the states working together with EPA...”

The success of the CWA’s point source control program was made possible due to the focus on predictable and manageable flows identifiable end-of-pipe controls and monitoring and substantial federal funding for treatment facilities.

* By contrast, stormwater management involves highly variable and unpredictable loadings which do not easily fit into the current regulatory permitting requirements that were developed based on steady state loads, not precipitation driven discharges. Moreover, there is extremely limited funding available for stormwater treatment and control systems.

2. We are experiencing a paradigm shift in water pollution control with an entirely new set of realities and a completely different driver

It will be necessary to change and refocus from the regulation of large steady-state discharges toward the regulation of highly variable precipitation driven discharges. However, reacting to this by merely re-labeling sources as “point source” will not effectively address the problem. Instead it leads to regulatory uncertainty and increased litigation over the “words on the page.” The use of TMDLs can belie the underlying concepts of “assimilated capacity” daily loads, and certainty. We must replace these static concepts in the regulations with new and adequate ideas that acknowledge the inherent uncertainty in managing precipitation driven discharges.

3. The existing regulatory scheme no longer fits

There are severe problems inherent with moving forward under the existing regulatory framework. The current top-down approach fails to address these problems. As ASIWPCA noted in its Call for Change, “[t]he recent trend of stretching the NPDES program to control pollution it was not intended to control has been troublesome. Efforts to identify ways to transform precipitation-related discharges into point sources which are not related to precipitation in order to take advantage of the NPDES regulatory tool have led to litigation and uncertainty.”

The adverse impacts of stormwater runoff are well known. What is not well known are effective, efficient, and holistic solutions. EPA’s current NPDES stormwater regime creates potential for scattershot permitting, making integrated watershed protection, and restoration difficult.

Experience “on the ground” and “in the courtroom” provides the realization that changes to NPDES regulations are needed for scientifically sound, cost-effective, sustainable and legally defensible regulation. This situation begs for creative problem solving, innovative solutions and full collaboration between the federal and state governments. There are currently both legal and scientific shortcomings in the NPDES regulatory scheme that will be unintentionally spread nationwide. Examples include:

- Permitting for post-construction discharges during the construction phase

X

Issues of permitting of new discharges into impaired waters, e.g., Pinto Creek

- Anti-degradation and the challenge of measuring degradation from a single discharge and the cumulative impacts throughout a watershed in the context of new stormwater discharges into receiving waters
- The current trend in MS4 permitting that requires TMDL implementation (e.g., Vermont, Region 1 North Coastal permit) even though it will become unsustainable due to high costs and administrative burden. As a result litigation will become more attractive than compliance
- Residual designation authority has "broken out" in Region 1. There is heightened legal vulnerability due to increased volume of information on water quality and sources of impairment. Since a petition may be made by any interested party at any time, the result is an artificially forced use of scarce state resources on petitioner-driven remediation, which may not be timely or cost-effective. Ultimately this will create an immense administrative burden on the regulating agency and an unnecessary cost on the regulated community

Given the multitude of sources, confounding logistics, and the staggering costs associated with treatment of precipitation driven discharges, there is an overwhelming need for prioritization and risk-based evaluation of permitting efforts. There are a number of stressors affecting our waters, including urban and agricultural runoff, runoff from roads, and point sources.

Before we move ahead with a nationwide permit for new impervious surfaces we should target what is needed and effective, regionally and locally, as follows:

- Assess which stressors are affecting each watershed (e.g., agriculture, impervious surfaces) and apply appropriate regulatory tools that will solve or avoid the problem.
- Determine if regulation is needed on discharges from new or existing surfaces. In many areas, existing surfaces that are the problem.

X

Weigh the high cost/regulatory burden of a wholesale application of a new NPDES permit against the environmental returns.

The time is ripe for addressing the existing and severe shortcomings in the NPDES permitting scheme. For example, the potential effects of these issues will be extremely important to consider in conjunction with development of the new post-construction program.

We need to recognize and adjust our regulatory framework to accommodate the full realm of these new challenges, including the following:

X

Permitting under wet weather conditions which due consideration to the high variability in receiving water conditions, the intensity and duration of precipitation events and the antecedent surface conditions

X

Fully recognize and acknowledge BMPs which are properly designed and installed as the full permit requirements

- Regional differences in precipitation patterns and amounts, seasonal climate variations, topography, soils, and development patterns
- Prioritization of efforts which will maximize cost-effectiveness and environmental yield.
- Risk-based permitting tools should also be used
- Prescribing adequate timeframes for implementation
- Phasing of implementation
- Ensuring fairness among states, communities, neighbors; between currently built properties and new development; between steady-state discharges and precipitation-driven discharges
- Consideration of the staggering costs and lack of adequate funding mechanisms. Discharges from existing surfaces and activities are not discretionary
- Employ adaptive management concepts and iteration of efforts. Performance based solutions should be sought, not mere reliance upon the TMDL model

Going forward we ask EPA:

Re-establish a true partnership with the states and work together to comprehensively address the failings in current point source based regulations. There is a lot of expertise in states that have been struggling to make this all work for years, and the full weight of implementation of new initiatives will ultimately fall to the states.

We need a cooperative effort between EPA and the states to comprehensively reassess the regulatory "toolbox", to refine old tools and create the necessary new tools. We need to develop a collective "comfort level" (federal, states, regulated communities, environmental groups) in order to regulate in a world of scientific uncertainty. We need to make enlightened decisions on the best approaches to avoid protracted disputes and litigation.

Without this comprehensive and collaborative reassessment and refinement, there will be potentially decades of wasted effort, litigation, lost opportunities and unnecessary costs. The true measure of this failure will be unnecessary delays in water quality improvements.

Now is the time to develop the necessary new underlying regulatory structure to effectively and directly address new challenges. This may necessitate a comprehensive rewrite of NPDES regulations and the development of a new regulatory program for precipitation-driven discharges including, among others things:

- Revamping NPDES permitting tools and requirements
- Re-evaluating the current approach to managing impaired waters, including permitting requirements and role of Municipal Separate Storm Sewage System (MS4)

- Rethinking whether TMDL development is the best approach to address stormwater driven impairments that are often dominated by non-point sources
- Developing scientifically defensible anti-degradation requirements appropriate for wet weather conditions. Regional variability should be included within any discussions of NPDES permits
- Support all of the above with sound science, and an acceptance of scientific uncertainty that is appropriately reflected in permitting requirements set forth in NDPEs regulations

Next Steps / Recommendations

States want an effective stormwater management program that truly works. In many places it represents a significant opportunity for continued improvement in water quality. The quickest and most effective path forward first requires restocking the toolbox in a manner that incorporates the following:

- A clear acknowledgement of differences in steady-state versus precipitation-driven discharges
- The ranking of sources of wet weather pollution and the prioritization of efforts
- Building in regulatory patience
- Development of new regulatory programs and tools
- Use of intuitive BMP-based standards

In this effort, we should address the effects of recent and ongoing litigation. EPA should actively engage with the states. Collaborative brainstorming is critical. States and municipalities have a wealth of collective knowledge and experience derived from years of regulating precipitation driven discharges. We encourage EPA to work in an equal partnership with the states to comprehensively assess the problems and challenges, and together devise and implement new methods for effectively managing these challenges.

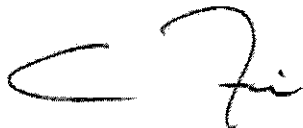
Lisa Jackson, in closing her remarks at the Coming Together for Clean Water Conference said, "[w]e have had 40 years of advances in environmental protection and clean water Now, we must get to work on the next 40 years". The states, partnering with EPA, effectively accomplished many of these advances. We want to continue to effectively partner with EPA to meet the challenges of the next forty years. We have critical knowledge and skills in many areas necessary for the successful design and implementation of comprehensive approaches for managing water quality in this new paradigm. We look forward to truly partnering with EPA in development and implementation of these efforts.

Conclusion

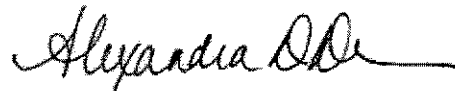
ASIWPCA appreciates the opportunity to provide our comments in writing to the Agency. Should you have further questions regarding our input, please do not hesitate to contact any of the

individuals referenced in this document, or Lori Belangia, ASIWPCA Project Manager, at 202-386-6352 or l.belangia@asiwpca.org.

Sincerely,

A handwritten signature in black ink, appearing to read "C Fisk".

Dr. Andrew C. Fisk
ASIWPCA President
Director, Bureau of Land & Water Quality
Maine Department of Environmental Protection

A handwritten signature in black ink, appearing to read "Alexandra Dapolito Dunn".

Alexandra Dapolito Dunn
Executive Director & General Counsel

Discussion Points (suggested by Janet Kieler)

1. Effluent Limitation Guidelines (ELG) – Proper interpretation
 - a. Agreement on what part of site is covered under ELG and what is not
 - b. BPJ on areas not explicitly subject to ELG
2. Definition of stormwater vs. process water
3. Types of effluent limitations
 - a. Process water: numeric (and narrative)
 - b. Stormwater: no limitations vs. practice-based vs. benchmarks vs. numeric
4. Administrative issues including the general permit vs. individual permit determination

Primary Concerns with Coal Mining Process and Stormwater General NPDES Permit

1. Application of stormwater permit to areas not originally intended for stormwater coverage
 - a. Current permit states that the Stormwater Management Plan (SWMP) must cover all areas not previously permitted including “roads and railroad lines used for transportation to and from the site, outslopes of ponds, inactive loadouts, sites used for storage and maintenance of material handling equipment, and areas granted small area exemptions”.
 - b. 40 CFR 122.26 (cited in general permit) states that stormwater from the following areas do not need to be permitted: flows which are not contaminated by contact with or that have not come into contact with overburden, raw material, intermediate products, finish product, byproduct, or waste product.
 - c. Stormwater should not be applied to flows that are not contaminated. This would include reclaimed areas, undisturbed areas, haulroads / access roads no longer used for hauling coal or overburden, pond outslopes, etc.
 - d. Stormwater not intended to apply to any areas that drain through a sediment pond and subject to an NPDES permit.
2. Stormwater discussion should retain section on allowable non-stormwater discharges, including irrigation return flow and natural spring water.
3. Types of stormwater requirements and limitations:
 - a. The general permit needs to retain its current stormwater inspection frequencies (comprehensive inspections required semiannually, preventative maintenance inspections do not have a required frequency).
 - i. Preventative maintenance and issues identified during inspections should not be held to restrictive time schedules for maintenance and / or corrective action. The current wording (“repairs and maintenance must be completed immediately”) does not allow operational flexibility.
 - b. The general permit should not add any monitoring / water sampling requirements for stormwater discharges.
 - c. Stormwater cannot be realistically compared to benchmarks or numeric limitations at a mine site, especially in arid environments subject to intense precipitation events.
 - d. Practice-based effluent limits should not be imposed in this permit. The dynamics of coal mine facilities must allow flexibility in areas such as minimization of exposed areas, selection of erosion control measures, etc.
 - e. Implementation of best management practices is more practical than attempting to sample and quantify stormwater flows. Implementation of best management practices is effective and enforceable (SMCRA and DRMS inspections). In fact, many stormwater BMPs are already accounted for in SMCRA regulations.
4. Onerous NPDES requirements stray from federal coal general permit requirements
 - a. Additional analyses required:
 - i. Alkaline and Acid or Ferruginous Basins: TDS, P_T , Fe_{TR} , “Other Pollutants of Concern”, WET testing (chronic and acute)

- ii. Post Mining Basins: TSS, oil and grease, TDS, P_T , Fe_{TR} , “Other Pollutants of Concern”, WET testing (chronic and acute)
 - iii. Western Alkaline Basins: Sediment Control Plan (consistent with ELG)
 - b. Currently, weekly analyses are required for the majority of analytes unless determined to be a minor facility. There is no justification provided for weekly monitoring.
 - c. Incorrect standard effluent limits vs. alternate effluent limits
 - i. Currently, the alternate effluent limits include TSS as a report only analyte.
 - ii. Currently, settleable solids is included in standard effluent limits instead of alternate effluent limits.
 - iii. 40 CFR 434 specifically outlines what should be sampled in the standard effluent limits and what should be sampled in the alternate effluent limits. These were derived based on the treatment technologies.
 - d. WET testing requirements are unnecessary and no justification is provided
 - i. ELGs do not include WET testing requirements. Typical coal mine drainage does not exhibit WET.
 - ii. On ephemeral streams, there is no need for WET testing (streamflow conditions do not match WET test conditions and obligate organisms do not exist).
 - iii. On intermittent streams, only acute WET standards should apply (streamflow conditions do not match WET test conditions)
 - e. Reasonable Potential
 - i. In the event that multiple additional analytes are initially included in a General NPDES permit, the permittee should have the right to request a reasonable potential analyses be performed to reduce monitoring requirements.
- 5. Coal preparation vs. coal handling
 - a. CDPHE needs to make a distinction between facilities that wash coal in a coal preparation plant and facilities that handle, crush, screen, and stockpile without washing the coal.
 - b. Facilities that do not wash coal should have different effluent limits from those that do. Consider applying alkaline mine drainage effluent limits to these types of outfalls.

Primary Concerns with Hardrock Mining General Stormwater Only Permit (nearly identical to those identified above)

1. Individual vs. general permit criteria
 - a. The current permit lists numerous criteria that would necessitate an individual permit. Many of these are unnecessary and ambiguous including: quality of receiving waters, discharge of pollutants of concern for which there is a TMDL, the type of mining operation and pollution potential, and the size of the facility.
2. Types of stormwater requirements and limitations:
 - a. The general permit needs to retain its current stormwater inspection frequencies (comprehensive inspections required semiannually, preventative maintenance inspections do not have a required frequency).
 - i. Preventative maintenance and issues identified during inspections should not be held to restrictive time schedules for maintenance and / or corrective action. The current wording (“repairs and maintenance must be completed immediately”) does not allow operational flexibility.
 - b. The general permit should not add any monitoring / water sampling requirements for stormwater discharges.
 - c. Stormwater cannot be realistically compared to benchmarks or numeric limitations at a mine site, especially in arid environments subject to intense precipitation events.
 - d. Practice-based effluent limits should not be imposed in this permit. The dynamics of mining facilities must allow flexibility in areas such as minimization of exposed areas, selection of erosion control measures, etc.
 - e. Implementation of best management practices is more practical than attempting to sample and quantify stormwater flows. Implementation of best management practices is effective and enforceable (DRMS inspections).
3. Stormwater discussion should retain section on allowable non-stormwater discharges, including irrigation return flow and natural spring water.
4. Additional issues specific to inactive mine requirements

CMA Concerns With Non-Extractive Stormwater Permit

1. There was no cost benefit analysis showing impact to both business community and regulatory agency workload.
2. The revised permit removed “allowable non-stormwater discharges” including potable water, irrigation drainage, pavement wash waters, and routine external building washdown.
3. CDPHE imposes benchmarks with no explanation. It has not been shown why the benchmarks are appropriate for stormwater discharges in Colorado.
4. The move towards numeric standards for stormwater is counterintuitive and contrary to original intent of regulations. Use of BMPs and benchmarks is protective of the environment without being overregulated.
5. Monthly inspection requirement is unnecessary and only increases cost (this was changed to quarterly in the final draft). Inspections during storm events are impractical and unsafe.
6. Collection of data during storm events implies that all events must be monitored.
7. Follow-up monitoring requirements are impractical because of the variability in storm events across a site.

CMA Letter in Response to Non-Extractive Stormwater Permit

1. Implemented a one-size-fits-all permitting approach.
2. While CDPHE states that there is an identified gap between state and federal requirements, little backing information is provided.
 - a. Potential for discharges of pollutants is the activity that the permit is intended to authorize.
 - b. CDPHE conducted an analysis showing exceedances of benchmarks. This does not indicate that stormwater controls are not being effectively implemented. There is no correlation between benchmark values and the effectiveness of controls.
 - c. CDPHE states that facilities continue to discharge stormwater pollutants have the potential to cause or contribute to an exceedance of water quality standards. However, there was no instream data provided to show the link between stormwater discharges and instream exceedances.
3. CDPHE has implemented inflexible “practice-based effluent limits”, numeric benchmarks, and broad-ranging conditions triggering corrective action.
 - a. The practice-based effluent limits should not be required and imposed as effluent limits. They are broad ranging criteria such as housekeeping, training, and minimization of exposed materials. Calling these “effluent limits” implies that they are enforceable standards. Rather, these should be considered best practices and implemented at facilities as needed.

Colorado Mining Association Comments on Stormwater Provisions in the Coal Mining General Permit (COG-850000) and the Metal Mining Operations and Mine-Waste Remediation Permit (COR-040000)

The Colorado Mining Association would like to provide the following comments on the Stormwater Discharges Associated with Metal Mining Operations and the Mine-Waste Remediation Permit (COR-040000) and the stormwater provisions in the Coal Mining General Permit (COG850000). CMA would also like to incorporate and reiterate comments submitted on August 18, 2011 and August 29, 2011, on the Stormwater General Permit for Non-Extractive Industrial Activity. Many of these comments can be applied directly to these stormwater permits.

Stormwater Provisions General:

CDPHE has discussed numerous additions that are being planned for the stormwater requirements in the general permit. Examples of such additions include required sampling, benchmarks, and increased inspection frequencies among others. However, the department has not articulated a justification for the additional requirements. During the pre-public notice meeting, there were no examples given of wide scale noncompliance or results of pollution from stormwater discharges at mine sites. These proposed requirements add yet another burden on to the mining industry and should have to be justified. While the department argues that this additional burden is not substantial, it is the cumulative effect of regulatory requirements that has a substantial impact on the industry, increasing the cost of products, reducing jobs, and hindering competition.

Additionally, it is important to keep in mind that the mining industry is extensively regulated by the Colorado Department of Reclamation Mining and Safety (CDRMS). Specifically, coal mines are regulated by provisions of the Colorado Surface Coal Mining Reclamation Act (Colorado SCMRA) and hard rock and metal mines are regulated by the Colorado Mined Land Reclamation Act (Colorado MLRA). The requirements of SCMRA and MLRA have common ground with the stormwater provisions in the general permit. Examples of such requirements include site inspections, design, implementation, and maintenance of Best Management Practices (BMPs), and water quality sampling.

Areas of Applicability:

The permit needs to be clear with regard to the areas that it is applied. The current Colorado permit cites the Code of Federal Regulations (40 CFR 122.26) that prohibits requiring a permit for stormwater discharges,

“...which are not contaminated by contact with or that have not come into contact with, any overburden, raw material, intermediate products, finished product, byproduct, or waste products”.

Conversely, the current Colorado permit applies the stormwater permit to “all areas not previously permitted” and includes some areas where uncontaminated stormwater at mining

operations may be generated, such as “roads and railroad lines, out slopes of ponds, inactive loadouts, sites used for storage and maintenance of material handling equipment, and areas granted small area exemptions”. For instance, stormwater runoff from the out slopes of sediment ponds has no realistic potential for contamination due to CDRMS construction and maintenance requirements.

CMA believes that applying the stormwater provisions to all areas not previously permitted is overreaching. The stormwater permit should only be applied to areas that do not drain to point source outfalls permitted under CPDES general or individual permits and that may contaminate stormwater by contact with coal, mineral, or refuse materials. If there is no possibility for the runoff to become contaminated by contact with coal, mineral, or refuse material, there is no reason for the area to be covered by the stormwater provisions. Some of the example areas that are listed may never have the potential for contamination including, but not limited to, the out slopes of ponds, areas granted small area exemptions, office buildings and parking lots, and all undisturbed areas. This should be clarified in the revised permit.

BMP Selection

At coal mines, BMP selection and implementation is regulated by Colorado SCMRA which states,

“(disturbance to the hydrologic balance must be minimized by)...conducting surface coal mining operations so as to prevent, to the extent possible using the best technology currently available, additional contributions of suspended solids to streamflow, or runoff outside the permit area, but in no event shall contributions be in excess of requirements set by applicable State or Federal law” (SCMRA 34-33-120(2)(j)(II)(A)).

Hard rock and metal mining sites have comparable requirements established by the Colorado Mined Land Reclamation Act. Numerous manuals have been written to designate and design the structural methods of erosion control that are typically employed at Colorado mining operations. Some of the primary BMPs used include the use of sedimentation ponds, small check dams and detention basins, mulching and timely revegetation, surface roughening techniques, contour terraces, and straw bales and filter fencing. Existing BMPs required by CDRMS and routinely implemented and maintained should not be superseded by BMPs required by the stormwater permit, and any additional BMPs should be justified.

Inspections

In the case of site inspections, at active mine sites partial inspections are conducted monthly and complete inspections are conducted quarterly by the CDRMS. Inactive and reclaimed mine inspection frequencies can be reduced to quarterly. Such inspections typically involve investigation of a facilities best management practices, including contemporaneous reclamation, diversions, sediment ponds, berms, and other erosion control structures. Again, manuals have been written for reclamation inspectors to train them on hydrologic processes and soil conservation and revegetation at mine sites. In the event that CDPHE feels that these inspections

are insufficient, CDPHE should work with DRMS to ensure these encompass the stormwater concerns. In Wyoming DEQ's 2007 response to comments, they determined that "at facilities where inspection requirements of the Land Quality Division (LQD) overlap with storm water requirements permittees may use the results of such inspections to satisfy some or all of the storm water requirements" (WDEQ 2007). This approach should also be considered by CDPHE.

Sampling:

Issues with sampling requirements can be separated into the following categories: 1) safety, 2) feasibility of monitoring, 3) spatial extent and environmental benefit, and 4) existing monitoring requirements. The following paragraphs describe these issues in more detail.

1) Safety: The areas subject to stormwater monitoring are relatively small in spatial extent compared to the drainage areas above CPDES permitted point-source outfalls. In these cases, the limited drainage area above the stormwater outfalls does not lend itself to monitoring. The amount of precipitation that would need to occur to produce runoff from these small areas is appreciable, and the runoff is typically sheet flow and of very short duration. Attempting to sample during intense events is dangerous for mine personnel due to lightning, flash floods, and poor road conditions that commonly accompany the storms that generate runoff. Moreover, these areas are often in the remote reaches of the mining permit area, which may be inaccessible during storm events.

2) Feasibility of Monitoring: The cellular nature of storms in the west and the practicality of monitoring these events must be considered. The development of the western alkaline coal mining ELG examined the feasibility of monitoring localized and intense storms. EPA determined that sampling and determining compliance from BMPs is infeasible because of the environmental conditions present. The Federal Register Notice further states that

"Precipitation events are often localized, high-intensity, short-duration thunderstorms and watersheds often cover vast and isolated areas. Rain may fall in one area of a watershed while other areas remain dry, making it extremely difficult to evaluate overall performance of the BMPs. These factors combine to make it burdensome for a permitting authority or mining operator to extract periodic, meaningful samples on a timely basis."

The previous statement was in regard to sampling at sediment basins, but the same interpretation applies to the very small areas that may be subject to stormwater provisions in remote areas of Colorado mining operations. Furthermore, these short-duration events produce runoff shallow in depth precluding the collection of representative samples for analytical purposes. There are also instances where offsite runoff drains onto the permit area and mixes with onsite stormwater. These types of issues exemplify the difficulties with sampling stormwater as opposed to site inspections, which are effective at identifying erosion problems early and provides a means for timely corrective action. For these reasons, sampling requirements should not be imposed in these permits.

3) Spatial Extent and Environmental Benefit: The areas that are subject to the stormwater permits are small in spatial extent. Drainage across the majority of a mine site is directed through sedimentation ponds. Many times, the areas that are subject to the stormwater provisions are only a small fraction of the mine site area. Discharges from these areas commonly feature shallow depths, relatively low rates, and short durations. When this is considered on a watershed scale, the overall impact from such areas is diminished even further. Prior to implementing additional onerous requirements on these stormwater areas, the overall environmental benefit of such actions should be considered.

4) Existing Monitoring Requirements: Colorado coal mine regulations and hard rock and metal mine regulations require that surface water is monitored both upgradient and downgradient of the mine. A list of the analytes that are suggested surface water parameters at coal mines are provided in Table 1. The quarterly monitoring results at these sites are reported in the Annual Hydrology Report submitted to CDRMS. CPDES permits also require monitoring of point-source outfalls on a regular basis and following storm events. Results of such monitoring provide another method of assessing overall onsite BMP effectiveness for controlling stormwater even though the effectiveness of individual ASCMs or BMPs may not specifically become evident.

Table 1: Typical water quality parameters during baseline sampling at coal mines (from Coal Section Guidelines for the Collection of Baseline Water Quality and Overburden Geochemistry Data: Table 2).

Field and Physical Parameters	Major Ions	Trace Elements*
pH (field) Conductivity (field) Temperature (field) Dissolved Oxygen (field)** Total Suspended Solids **	Total Dissolved Solids Sodium Adsorption Ratio Bicarbonate Calcium Chloride Magnesium Nitrate-Nitrite Phosphate Sodium Sulfate	Aluminum Arsenic Cadmium Copper Iron Lead Manganese Mercury Molybdenum Selenium Zinc
*Analyzed in total and dissolved species		
**Not necessary for springs and seeps		

Benchmarks:

For reasons previously stated, CMA does not believe that sampling of stormwater sites is feasible or beneficial. However, in the event that sampling is required, the benchmarks and associated corrective actions should be removed for the following reasons.

The 2008 MSGP implements benchmarks of 0.75mg/L for total aluminum, 1.0 mg/L for total iron, 100 mg/L for total suspended solids for Sector H (Coal Mining) and numerous additional

analytes for Sector G (Metal Mining) including, but not limited to, pH, turbidity, total suspended solids, antimony, arsenic, beryllium, cadmium, copper, iron, lead, mercury, nickel, etc. It is CMA's belief that the benchmarks for TSS and metals in total form are overly stringent and unrealistic during stormwater flows.

With regard to TSS, establishment of a 100 mg/L benchmark has no basis. First, at coal mine sediment basins subject to ELGs, the TSS daily maximum limit is 70 mg/L during dry weather. TSS will increase dramatically during storm events, and can easily exceed the Federal benchmark, even with the most effective sediment control (sediment basins) in place. An EPA study on mines in the Eastern U.S. showed that during rainfall events, average TSS exceeded 100 mg/L at 5 out of 9 ponds following sediment basin treatment, sometimes by orders of magnitude (EPA 1976). Similarly, a case study at the Jim Bridger Mine in southwestern Wyoming shows that undisturbed area runoff ranges from 110 to 820,000 mg/L (EPA 2001). The use of ASCMs at this Wyoming mine was employed to maintain runoff at levels comparable to pre-mining levels, which was accomplished. However, the study strongly indicates pre-mining levels would be in excess of the EPA's proposed benchmark. CMA contends that storm-driven suspended sediment from undisturbed areas in the Western U.S., including Colorado, would not meet the proposed EPA benchmark and this arbitrary level should not be implemented.

With regard to benchmarks for metals, such as total iron and total aluminum, these will also exceed the benchmarks employed by EPA in the 2008 MSGP. This is primarily because these metals are commonly bound to suspended sediments, and levels of these constituents will proportionally increase with increased suspended sediment concentrations (iron and aluminum are part of the minerals making up the sediment). Precipitation or snowmelt induced flows will naturally be high in total metals for this reason and often exceed water quality standards. This is evidenced at upstream monitoring locations currently sampled by mining companies, and at surface water sites monitoring as part of undisturbed baseline sampling programs required by CDMRS regulations. Additionally, in many cases the measurement of the total form overestimates the toxic fraction of a pollutant that is biologically available to aquatic life. Again, it is recommended that these arbitrary benchmarks not be implemented at the levels of the 2008 MSGP.

Furthermore, based on the recently finalized non-extractive stormwater permit, exceedances of benchmarks may require corrective action, documentation, and review of the SWPPP. For benchmarks that will be exceeded consistently, this will require a continuous loop of investigation by the permittee with negligible benefit to receiving stream water quality during basin-wide stormwater runoff events. Although the non-extractive permit allows for exceedances of benchmarks due to natural conditions, it still requires analysis, review, and documentation prior to relief, all of which is additional work for the permittee with little measurable environmental benefit.

In the case of both sampling and benchmarks, it is recommended that CDPHE examine historical mine discharge data to determine that there are existing issues at mine sites and that they justify these burdensome requirements. In the event that sampling is required, no numeric benchmarks should be required and all analytes should be "report only" for this permit term. This will allow

CDPHE ample time to collect data specific to Colorado and determine what, if any, numeric benchmarks are appropriate for this area.

A specific comment towards an aluminum benchmark, if it were to be implemented, is that it be consistent with the recently revised Colorado water quality standards.

Conclusion

CMA appreciates the opportunity to comment on the CDPHE Stormwater Discharges Associated with Metal Mining Operations and the Mine-Waste Remediation Permit (COR-040000) and the stormwater provisions in the Coal Mining General Permit (COG850000). If you have any questions regarding these comments, please contact the CMA office.

References

EPA 1976. Erosion and Sediment Control Surface Mining in the Eastern U.S. Volume 1: Planning. Office of Research and Development. EPA/625/3-76/006a. October 1976.

EPA 2001. Development Document for Final Effluent Limitations Guidelines and Standards for the Western Alkaline Coal Mining Subcategory. Office of Water. EPA 821-B-01-012. December 2001.

Wyoming Department of Environmental Quality (WDEQ 2007). *Analysis of Comments Received on Public Notice for Issuance of the General Permit for Stormwater Discharges from Industrial Activities (WYR00-0000)*. September 28, 2007.

Code of Federal Regulations Documents:

40 CFR 122.26. Storm water discharges (applicable to State NPDES programs, see 123.25).

Federal Register Documents:

67 FR 3370. Coal Mining Point Source Category; Amendments to Effluent Limitations Guidelines and New Source Performance Standards. EPA Final Rule. January 23, 2002.

Colorado Mining Association Comments on the Coal Mining General Permit (COG850000)

The Colorado Mining Association would like to provide the following comments on the Coal Mining General Permit (COG850000). Additional comments on the stormwater provisions in this General Permit are being provided separately.

Inconsistencies with Federal ELG (40 CFR 434):

The effluent limitations in the Coal Mining General Permit are inconsistent with the Federal Effluent Limitations Guidelines (ALG) at 40 CFR 434. First, the categorization of the Colorado general permit is not consistent with the Federal ELG. The Federal ELG specifically established technology-based effluent limitations for coal mining and further separated them into subcategories including alkaline mine drainage, acid or ferruginous mine drainage, coal preparation plant and associated area drainage, post mining drainage, and western alkaline coal mining. These areas were separated in the Federal ELG because they display significantly different effluent characteristics and are operated under different conditions. The Colorado coal general permit essentially applies identical requirements to each of these areas, regardless. Also, the Colorado coal general permit includes a category titled “Surface Runoff or Non-Coal Mining Related Waste Streams”, which is essentially non-applicable to coal mining activities. It is recommended that Colorado retain the Federal categorization of coal mining areas to avoid this confusion.

There are additional discrepancies that are outlined below. For reference, we have provided tables at the end of this document outlining CMA’s interpretation of the discharge limitations for each category in the Federal ELG. The following paragraphs outline other inconsistencies that CMA has identified.

Alternate Effluent Events:

The Colorado coal general permit settleable solids limit of 0.5 mL/L is applied during non-precipitation induced, or baseflow discharges. The federal ELG only requires sampling for settleable solids during discharges caused by precipitation events for alkaline mine drainage and coal preparation plant areas. Settling basins were determined by USEPA to be BPT and BAT for treating wastewater discharges from coal mines that meet the criteria for alkaline mine drainage and coal preparation plant areas. Settleable solids was used as an indicator of settling basin effectiveness during precipitation-induced discharge events. It is recommended that settleable solids be removed from the list of parameters during baseflow discharges. Total suspended sediment is an adequate measure of sediment basin effectiveness during baseflow discharges.

Similarly, the Colorado coal general permit requires sampling for total suspended sediment during precipitation induced discharges. In the Federal ELG, total suspended sediment is not required to be analyzed during discharges caused by precipitation events. It was shown that suspended sediments varied widely in wastewater influenced by precipitation events, depending on site specific conditions, and that numeric limits could not be met during these discharge events (47 FR 45382). Instead a limitation for settleable solids was implemented. It is recommended that total suspended sediment be removed from the alternate effluent limit

monitoring requirements (both less than the 10-yr. 24-hr. and greater than the 10-yr. 24-hr.). Instead, in the alternate effluent limits for precipitation events less than the 10-yr. 24-hr. event, it should be replaced with settleable solids and a daily maximum limitation of 0.5 mL/L. In the alternate effluent limits for precipitation events greater than the 10-yr. 24-hr., there should not be any sediment monitoring (neither total suspended sediment nor settleable solids).

The Federal ELG removes limitations for total iron in precipitation induced discharges. This is because, like total suspended sediment, total iron is not effectively treated by settling basins during precipitation events. Also, measurement of the total form overestimates the toxic fraction of a pollutant that is biologically available to aquatic life. Iron is the fourth most common element by mass in the Earth's crust and can be found in high concentrations in sedimentary particles. In general, iron bound to or making up particulate matter in the silt or sand grain size fraction are not biologically available for uptake to aquatic life. It is recommended that total iron be removed from the alternate effluent limit monitoring requirements (both less than the 10-yr. 24-hr. and greater than the 10-yr. 24-hr.).

Frequency:

The requirement to sample on a weekly basis at coal preparation area and active mine alkaline basins should be changed to bimonthly for all sites. Discharges from coal preparation areas and active mining areas occur during precipitation events and possibly for a few hours following the event. For many months of the year there are no discharges: precipitation events in the western United States are discussed in detail in the next section. The nature of western storm events and work done by EPA demonstrates that weekly sampling would be impractical and not necessary.

For post-mining discharges, this monitoring frequency should be reduced further to quarterly. Once a mine area has been reclaimed, there is minimal variation in the water quality. Quarterly sampling is sufficient to capture the average runoff quality of these reclaimed areas.

Western Alkaline Coal Mining:

The coal general permit implies that both numeric effluent limits and a sediment control plan are required for this subcategory. CMA contends that areas are only subject to the western alkaline coal mining subcategory based on the criteria for applicability at 40 CFR 434.81, and if the operator and permitting authority determine that it is appropriate. Further, areas subject to the western alkaline coal mining subcategory should not have numeric technology-based effluent limits, but instead implement the sediment control plan.

The western alkaline coal mining subcategory was originally developed to reduce adverse impacts of traditional sediment ponds to the environment. Such impacts included 1) requirement of additional surface area disturbance, 2) environmental harm through disruption of the hydrologic balance, 3) adverse effects to riparian and aquatic communities, and 4) contention during administration of water rights. The 2001 development document for the western alkaline subcategory recognized that large amounts of sediment are readily and naturally transported in these regions and states that (EPA 2001):

“In fact, these systems depend upon continual source and flow of sediment to maintain the existing natural sediment balance”.

The report goes on to state:

“However, meeting numeric effluent limitations under the CWA has taken precedence over SMCRA's requirement to minimize, to the extent possible, impacts to the hydrologic balance. This precedent has, at times, resulted in adverse environmental effects and impacts to the hydrologic balance”.

This report concludes that the use of Best Management Practices (BMPs), instead of settling basins, would be beneficial to the hydrologic balance. Thus, if appropriate, the operator can choose to remove sediment ponds after a site has undergone reclamation and BMPs can be employed instead. In some cases, sediment ponds may be used in conjunction with other BMPs in order to control sediment load where necessary.

The western alkaline study resulted in the following effluent limits 1) submittal of a site-specific Sediment Control Plan, 2) demonstration with watershed models that implementation of BMPs result in post-mine sediment yield that does not exceed pre-mine levels, and 3) designing, implementing, and maintaining BMPs as specified in the sediment control plan. These effluent limits are only to be applied to areas where the *operator and permitting authority choose to use BMPs* and convert the outfall to the Western Alkaline Coal Mining subcategory. The Colorado SCMRA regulations also address the removal of sedimentation ponds at 2 CCR 407-2 4.05.2, stating that sedimentation ponds shall be maintained until removal is authorized and “the untreated drainage from the disturbed area ceases to contribute additional suspended solids above natural conditions”.

EPA determined that in these areas, numeric effluent limits were unnecessary and in some instances, not feasible. In the Federal Register Notice with the final rulemaking, EPA states that

“EPA believes that determining compliance for settleable solids based on a single numeric standard for runoff from BMPs is infeasible at western coal mines due to the environmental conditions present. Precipitation events are often localized, high-intensity, short-duration thunderstorms and watersheds often cover vast and isolated areas. Rain may fall in one area of a watershed while other areas remain dry, making it extremely difficult to evaluate overall performance of the BMPs. These factors combine to make it burdensome for a permitting authority or mining operator to extract periodic, meaningful samples on a timely basis.” (67 FR 3370).

The rulemaking goes on to say that:

“EPA does not believe that toxic or acid forming materials will be present in the runoff from non-process areas of alkaline coal mines. However, EPA acknowledges that SMCRA requirements are an additional measure of protection to ensure that any acid forming or toxic forming pockets will be identified and addressed as necessary to prevent release of these materials in stormwater runoff.”

For these reasons, once a drainage area is designated in the western alkaline subcategory, no numeric limitations should apply. Instead, submittal of the site specific Sediment Control Plan should suffice.

Post Mining Areas:

The Colorado general permit requires numerous monitoring requirements for post-mining discharges that are beyond those required by the Federal ELG. For many of the reasons previously explained, EPA implemented a requirement to monitor for *pH and settleable solids only* on post-mining areas. Since these areas have been reclaimed, there is no reason to expect toxic pollutants in deleterious amounts. Furthermore, since these areas have been returned to a stable landform, the potential variability in pollutants and pollutant concentrations is minimized. CMA recommends that CDPHE implement the monitoring requirements consistently with the Federal ELG.

Additional Analytes (Comments Applicable to All Analytes):

The coal general permit includes numerous additional analytes that are not in the Federal ELG. These include oil and grease, total dissolved solids, total phosphorous, total recoverable iron, Whole Effluent Toxicity (WET, chronic and acute), and “other pollutants of concern”.

First, the benefit of a general permit is lost to both the permittee and the State with the addition of numerous analytes. The addition of numerous analytes subjects a holder of a general permit to nearly the same amount of monitoring required by an individual permit, eliminating the benefit of a general permit. This also would likely only minimally reduce the workload to CDPHE staff. Since the discharger may be subjected to the same monitoring requirements as an individual permit, the discharger will likely choose an individual permit to allow the potential benefit of assimilative capacity in receiving streams. This addition of analytes to the general permit also eliminates any benefit of implementing general permits to the State. As EPA states (EPA Unknown Year, Water Permitting 101),

“General permits may offer a cost-effective option for permitting agencies because of the large number of facilities that can be covered under a single permit”

For an agency with limited resources, a reasonably constructed general permit can help alleviate workload. However, the Colorado coal general permit as written will require a considerable amount of time by CDPHE staff reviewing monitoring data and assessing compliance with the permit terms and conditions and deters permittees from seeking coverage.

With respect to all pollutants that have been added above and beyond the Federal ELG for coal mining, it should be noted that the Federal ELG was based on extensive study of the industry and treatment technologies in place. The development of the Federal ELG was initially conducted in 1976, and involved the study of effluent data from over 200 coal mines across 22 states. Site specific effluent studies were conducted at 13 of these mines and are discussed in detail in the original development document. Although complete suites of pollutants were analyzed, the

resulting pollutants of concern were considered to have the highest potential for deleterious effects on water quality. EPA's study recognized that other pollutants (e.g. TDS) existed, but this study also recognized that economical treatment could not be proven (EPA 1976).

EPA reviewed the Federal ELG in 2008 to determine if it warranted update. Specific pollutants that were considered included TDS, sulfates, chlorides, mercury, cadmium, manganese, and selenium. The study focused on the Appalachian region, which is known to have potential for AMD and in general, has the potential for featuring higher concentrations of trace elements and poorer water quality than coal mines in western states. EPA determined that no update to the Federal ELG was warranted. It should be noted that WET limitations, were not added to or even considered in the Federal ELG even though this review was conducted long after EPA published its policy on WET implementation in permits.

Additionally, the Federal ELG employs the use of "indicator parameters", which establishes limits for those pollutants necessary to comply with technology-based requirements of the Clean Water Act (EPA Unknown Year, NPDES Permit Writers Manual). For example, pH can be used as an indicator for alkalinity and acidity, and similar arguments can be made for the choice of iron and TSS in the Federal ELG. This approach reduced the burden on the permittee while providing sufficient protection of water quality.

Also, as quoted from EPA, alkaline drainage at western coal mines generally does not contain sufficient amounts of acid or toxic materials. SCMRA ensures that if these materials are encountered, they are specially handled to minimize the formation of acid or toxic drainage and acidic, toxic, or harmful infiltration to groundwater systems. All of these previous items should be taken into account when determining appropriate analytes for the coal mining general permit.

Total Dissolved Solids:

In the case of total dissolved solids (TDS), it is known that coal mining can cause an increase in dissolved ions through the weathering of overburden and coal materials. However, best management practices employed at coal mines are aimed at minimizing the potential for weathering to occur. SMCRA requires that disturbances to the hydrologic balance must be minimized through avoidance of acid or toxic material and prevention of its contact with water (SMCRA 515(b)(10)). Such practices include contemporaneous reclamation, minimization of exposed areas, compaction of overburden and refuse materials, and use of clean water diversions.

There are a small number of treatment methods available for treating TDS, all of which are extremely costly to construct, operate, and maintain, and result in the generation of highly concentrated brines that have to be disposed of properly. These treatment methods cannot be feasibly or economically employed at coal mines due to the number and remote location of outfalls. Rather than require the costly analysis of TDS at all outfalls, an industry-wide demonstration should be made by the State in conformance with the Colorado Discharge permit System Regulations at 61.8(2)(1)(i)(A). This demonstration can show that total dissolved solids are minimized to the extent possible and that treatment for TDS is infeasible at the majority of coal mine sites. Furthermore, TDS is monitored at previously mentioned stream monitoring sites required by SMCRA. The quarterly monitoring results at these sites are reported in the Annual

Hydrology Report to DRMS. Any substantial trends in TDS concentrations are discussed in this document and reviewed by State personnel.

Total Recoverable Iron:

The coal general permit also requires monitoring of total recoverable iron and implements a 30-day average limitation of 1.0 mg/L based on the State water quality standard for aquatic life. Although this is permitted by the water quality regulations, it is questionable why the State has implemented additional requirements beyond the Federal ELG.

The Federal ELG was based on the numerous studies of coal mine effluents in 1976. Although many practices have improved since this time, the 30-day average standard was based on technology economically achievable and in place at the time, which was the use of sediment basins. Sediment basins are still the primary technology in place in conformance with CDRMS regulations, rendering whether this permit limitation will be attainable at the majority of Colorado mines sites as highly unlikely.

Furthermore, as was previously stated, CMA believes the total recoverable iron limitation is in error, in that it overestimates the biologically available fraction that is toxic to aquatic life. CMA has been participating in a study that intends to address iron prefiltration methods. Iron prefiltration would remove the nontoxic forms of iron in particulates. Preliminary results are to be presented to the upcoming 303(d) Methodology workgroup.

Lastly, water quality based standards lend themselves more to an individual permit, rather than a general permit. For these reasons, the water quality based effluent limit should be removed from the general permit.

Total Phosphorous:

The coal general permit adds the monitoring of total phosphorous if the operation is within the basin of specific reservoirs. However, the only potential source of phosphorous at coal mines is through the use of fertilizers during reclamation. There is no other significant source of phosphorous at coal mines and thus, it would not be expected to be in the discharge in appreciable amounts. This should be recognized and any coal mining operation that proposes to use phosphorous-based fertilizers has the option to seek coverage under an individual permit. The requirement for phosphorous monitoring should be removed from this general permit.

WET Testing:

CMA does not believe that there is justification for WET limits in a general permit for many of the reasons previously stated. There has been no demonstration that WET is a widespread issue at western coal mines. Further, the fact that EPA has not implemented WET in their Federal ELG suggests that it is not of substantial concern. Lastly, often times mines are located in remote areas in the headwaters of larger basins. These coal mines discharge to effluent dominated, ephemeral, and intermittent streams. The receiving streams would have limited aquatic life in these instances. For these reasons, the requirements for WET should be removed.

In the event that WET testing is retained, the permit should be implemented consistently with recent changes to the WET guidance regarding ephemeral and intermittent streams and controlled discharges.

Data Analysis for All Analytes

The existing data gathered through both the coal general permits and individual permits can help to justify removal of the monitoring requirements for the above analytes.

Individual vs. General Permits:

CDPHE stated during the pre-public notice meeting and within the Colorado coal general permit that the conditions that require an individual permit as opposed to a general permit are 1) discharge to impaired streams, 2) discharge of highly toxic chemicals in elevated concentrations, or 3) the permittee requests site-specific mixing zone or antidegradation considerations.

CMA disagrees with the automatic inclusion of ‘discharges to impaired streams’ for application of an individual permit. If a TMDL has been completed on a particular stream, an individual permit may be needed to incorporate wasteload allocations, although there may be exceptions to this. However, if a stream is listed as impaired with no completed TMDL, a general permit should still be allowed. There are numerous streams in the state that are listed due to naturally occurring conditions or are listed for more subjective impairments, such as impaired aquatic communities. It is CDPHE’s position that naturally impaired streams remain listed on the 303(d) list. If ambient based standard are sought on these streams, they are applied in an overly conservative manner, resulting in extremely low stream standards. CMA intends to comment on this issue during the upcoming 303(d) Listing Methodology review. However, for the purpose of the general permit review, CMA argues that the general permit can still apply to mines discharging to impaired streams.

CMA also disagrees with the automatic inclusion of “discharge of highly toxic chemicals in elevated concentrations” since this is a subjective determination. There is no definition of “highly toxic” or “elevated concentration” provided. This statement can be skewed to work against both a permittee and the department. It is recommended that this automatic inclusion also be removed.

Antidegradation

It is recommended that the antidegradation determination be conducted at the statewide level rather than on a permit-by-permit basis. In other words, an antidegradation determination can be undertaken for the entire Coal Mining General Permit. This will avoid the redundancy of conducting this analysis with every permit application. Requiring antidegradation based standards within a general permit is yet another deterrent for permittees.

Conclusion

CMA appreciates the opportunity to comment on the CDPHE's Coal Mining General Permit (COG-850000). If you have any questions regarding these comments, please contact the CMA office.

Coal Preparation Plant and Associated Area Drainage (40 CFR 434 Subpart B): Applicable to coal preparation plant and plant yards, immediate access roads, coal refuse piles, and coal storage piles and facilities.

pH Range Prior To Treatment	Applicable Limits	pH [S.U.]	Iron ¹ [mg/L]	Manganese ¹ [mg/L]	Total Suspended Solids ¹ [mg/L]	Settleable Solids ¹ [mL/L]
Acid or Ferruginous (pH < 6.0)	Standard Effluent Limitations	6.0 – 9.0 (NSPS) 6.0 – 9.0 (BPT) N.A. (BAT)	3.0 / 6.0 (NSPS) 3.5 / 7.0 (BPT) 3.5 / 7.0 (BAT)	2.0 / 4.0 (ALL) ²	35 / 70 (NSPS) 35 / 70 (BPT) N.A. (BAT)	--
	Alternate Effluent Limitations ≥ 1-yr. 24-hr. and ≤ 10-yr. 24-hr.	6.0 – 9.0 (ALL) ²	--	--	--	0.5 (ALL) ²
	Alternate Effluent Limitations ≥ 10-yr. 24-hr.	6.0 – 9.0 (ALL) ²	--	--	--	--
Alkaline (pH ≥ 6.0)	Standard Effluent Limitations	6.0 – 9.0 (NSPS) 6.0 – 9.0 (BPT) N.A. (BAT)	3.0 / 6.0 (NSPS) 3.5 / 7.0 (BPT) 3.5 / 7.0 (BAT)	--	35 / 70 (NSPS) 35 / 70 (BPT) N.A. (BAT)	--
	Alternate Effluent Limitations ≤ 10-yr. 24-hr.	6.0 – 9.0 (ALL) ²	--	--	--	0.5 (ALL) ²
	Alternate Effluent Limitations ≥ 10-yr. 24-hr.	6.0 – 9.0 (ALL) ²	--	--	--	--

1: First number denotes daily maximum, second number denotes monthly average

2: ALL includes BPT, BAT, and NSPS

Acid or Ferruginous Mine Drainage (40 CFR 434 Subpart C): Applicable to acid or ferruginous mine drainage from active mining areas. Acid or ferruginous drainage is defined as mine drainage which, prior to any treatment, either has a pH of less than 6.0 or a total iron concentration equal to or greater than 10 mg/L.

pH Range Prior To Treatment	Applicable Limits	pH [S.U.]	Iron ¹ [mg/L]	Manganese ¹ [mg/L]	Total Suspended Solids ¹ [mg/L]	Settleable Solids ¹ [mL/L]
Acid or Ferruginous (pH < 6.0)	Standard Effluent Limitations	6.0 – 9.0 (NSPS) 6.0 – 9.0 (BPT) N.A. (BAT)	3.0 / 6.0 (NSPS) 3.5 / 7.0 (BPT) 3.5 / 7.0 (BAT)	2.0 / 4.0 (ALL)	35 / 70 (NSPS) 35 / 70 (BPT) N.A. (BAT)	--
	Alternate Effluent Limitations ≤ 2-yr. 24-hr.	6.0 – 9.0 (ALL) ²	7.0 (ALL) ²	--	--	0.5 (ALL) ²
	Alternate Effluent Limitations > 2-yr. 24-hr. and ≤ 10-yr. 24-hr.	6.0 – 9.0 (ALL) ²	--	--	--	0.5 (ALL) ²
	Alternate Effluent Limitations (≥ 10-yr. 24-hr.)	6.0 – 9.0 (ALL) ²	--	--	--	--

1: First number denotes daily maximum, second number denotes monthly average

2: ALL includes BPT, BAT, and NSPS

Alkaline Mine Drainage (40 CFR 434 Subpart D): Applicable to alkaline mine drainage from active mining areas. Alkaline mine drainage is defined as mine drainage which, prior to any treatment, has a pH equal to or greater than 6.0 and total iron concentration of less than 10 mg/L.

pH Range Prior To Treatment	Applicable Limits	pH [S.U.]	Iron ¹ [mg/L]	Manganese ¹ [mg/L]	Total Suspended Solids ¹ [mg/L]	Settleable Solids ¹ [mL/L]
Alkaline (pH ≥ 6.0)	Standard Effluent Limitations	6.0 – 9.0 (NSPS) 6.0 – 9.0 (BPT) N.A. (BAT)	3.0 / 6.0 (NSPS) 3.5 / 7.0 (BPT) 3.5 / 7.0 (BAT)	--	35 / 70 (NSPS) 35 / 70 (BPT) N.A. (BAT)	--
	Alternate Effluent Limitations (≤ 10-yr. 24-hr.)	6.0 – 9.0 (ALL) ²	--	--	--	0.5 (ALL) ²
	Alternate Effluent Limitations (≥ 10-yr. 24-hr.)	6.0 – 9.0 (ALL) ²	--	--	--	--

1: First number denotes daily maximum, second number denotes monthly average

2: ALL includes BPT, BAT, and NSPS

Post Mining Drainage (40 CFR 434 Subpart E): Applicable to post-mining areas, except as provided in subpart H – Western Alkaline Coal Mining. Reclamation area is defined as the surface area of a coal mine which has been returned to required contour and on which revegetation (specifically, seeding or planting) has commenced. Underground mine drainage is defined as discharge from underground workings or underground mines which are not commingled with discharges eligible for alternate limitations.

Mine Drainage Area	pH Range Prior To Treatment	Applicable Limits	pH [S.U.]	Iron ¹ [mg/L]	Manganese ¹ [mg/L]	Total Suspended Solids ¹ [mg/L]	Settleable Solids ¹ [mL/L]
Reclamation Area	--	Standard Effluent Limitations	6.0 – 9.0 (NSPS) 6.0 – 9.0 (BPT) N.A. (BAT)	--	--	--	0.5 (ALL)
		Alternate Effluent Limitations (≥ 10-yr. 24-hr.)	6.0 – 9.0 (ALL) ²	--	--	--	--
Underground Mine Drainage	Acid or Ferruginous (pH < 6.0)	Standard Effluent Limitations	6.0 – 9.0 (NSPS) 6.0 – 9.0 (BPT) N.A. (BAT)	3.0 / 6.0 (NSPS) 3.5 / 7.0 (BPT) 3.5 / 7.0 (BAT)	2.0 / 4.0 (ALL) ²	35 / 70 (NSPS) 35 / 70 (BPT) N.A. (BAT)	--
	Alkaline (pH ≥ 6.0)	Standard Effluent Limitations	6.0 – 9.0 (NSPS) 6.0 – 9.0 (BPT) N.A. (BAT)	3.0 / 6.0 (NSPS) 3.5 / 7.0 (BPT) 3.5 / 7.0 (BAT)	--	35 / 70 (NSPS) 35 / 70 (BPT) N.A. (BAT)	--

1: First number denotes daily maximum, second number denotes monthly average

2: ALL includes BPT, BAT, and NSPS

References

EPA 1976. Development Document for Interim Final Effluent Limitations Guidelines and New Source Performance Standards for the Coal Mining Point Source Category. EPA 440/1-76/057-a. May 1976.

EPA 2001. Development Document for Final Effluent Limitations Guidelines and Standards for the Western Alkaline Coal Mining Subcategory. Office of Water. EPA 821-B-01-012. December 2001.

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67 FR 3370. Coal Mining Point Source Category; Amendments to Effluent Limitations Guidelines and New Source Performance Standards. EPA Final Rule. January 23, 2002.

Colorado Regulations

2 CCR 407-2. Regulations for the Colorado Mined Land Reclamation Board for Coal Mining. August 30, 1980.

WESTERN MINING ACTION PROJECT

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Re: Comments on COR040000 Stormwater Discharges associated with Metal Mining Operations and Mine Waste Remediation, and COG850000 Coal Mining Facilities

Dear Ms. Kieler and Ms. Rosow,

On behalf of Information Network for Responsible Mining (INFORM), thank you for the opportunity to submit comments on the Colorado Water Quality Control Division's ("Division") efforts to update the stormwater general permit for metal mining and coal mining. The public strongly supports the update of this general permit. Our understanding is that no comprehensive update has occurred to this permit since at least 1992. In conducting this update, the public strongly supports incorporating the concepts embodied in the EPA's updated permits as well as the recent update to the Colorado stormwater general permit for non-extractive industries. There is no justifiable reason for the mining industry in Colorado to receive any special treatment with respect to the terms of the stormwater general permit. This is especially true given the documented non-compliant field conditions and impacts to the environment associated with mine sites in the state. Indeed, the evidence of non-compliance with stormwater controls at mine sites in the state, particularly with those sites that have effective mining permits but are not actively mining ore, weighs heavily in favor of a comprehensive update to the stormwater general permit for metal mining.

As discussed at the stakeholder meeting on August 1, 2012, the proposed update involves numerous issues. While we will try to give input on each of these issues bullet pointed below, of particular importance in this permit update are the need for the general permit to contain 1) water quality monitoring/sampling, 2) enforceable and meaningful water quality standards, 3) compliance measures/corrective actions incorporated directly into the permit, and 4) provisions for on-site inspections. Further, the Division should ensure that all mining operations are subject to a stormwater permit, regardless of whether that operation is actively mining or in a period of

temporary cessation. Any allowance for “inactive” mines to escape water quality permitting requirements should be reserved solely for those mines that are truly abandoned – where no identifiable operator or property owner exists. A mine operator’s decision to temporarily halt active mining operations, but maintain permits allowing for the site to remain open and thereby avoid triggering final reclamation, should not allow the operator to avoid otherwise required stormwater discharge permits.

In terms of conditions in the field, the Division should recognize that stormwater discharges at mine sites in Colorado represent a potentially serious environmental and water quality threat, and have not demonstrated compliance with stormwater controls under the existing regulatory process. In particular, mine sites that have ceased (temporarily or otherwise) active mining operations, but remain open without final reclamation, have presented serious stormwater management issues. While the Colorado Division of Reclamation Mining and Safety (DRMS) has a role in regulating these mines, publicly available documents from that agency demonstrate the need for a more robust stormwater discharge monitoring and inspection regime to protect the environment and water quality. Through a comprehensive general stormwater discharge permitting scheme, the Division can ensure that water quality is protected and improved environmental outcomes are prioritized.

By way of pointed example, several West-Slope uranium mines have experienced substantial problems with stormwater management – which should have been detected and rectified through the Division’s permitting and enforcement process rather than relying on infrequent inspections from other agencies such as DRMS. For instance, Cotter Corporation’s West-Slope uranium mines have seen significant lapses in stormwater controls. At the JD-8 Mine, for example, a DRMS inspection report dated April 4, 2008 relates substantial failures in the stormwater management program at that site. Specifically, the DRMS inspector noted that “the ditches and grading have directed most of the stormwater into a make shift retention pond at the base of the waste dump. Rilling and other markers indicate that drainage is running down the main roads. A review of the permit indicates no formal stormwater control plans.” Exhibit 1 at p. 2. Importantly, this 2008 inspection is for a mine that was put in stand-by status after reactivation and a short time in production, which ceased in 2006. This gap in time and the uncontrolled nature of the stormwater discharges substantiates the need for a stormwater permitting program equipped to deal with these issues, without relying on infrequent inspections from other agencies. Even with these DRMS inspections, there is no information as to the effluent discharging from these sites – necessary data that should come from monitoring data required under a revised stormwater permitting approach.

Comparable problems have been discovered at other uranium sites. At the Burros Mine in the Dolores River watershed similar non-compliant field conditions were observed: “The upper areas of the permit are being severely eroded, including breaching of the berms, sediment filling the retention ponds, road berms overtopped, roadbed gullied deeply, culverts clogging, and possible increased erosion of natural drainages below the roads and dumps.” Exhibit 2 at p. 2. Similarly, at the Hawkeye Mine, the DRMS inspector noted that “In the past, stormwater has been adequately conveyed and managed on the site, but the control structures are now in need of repair. Upland drainage runs into the permit, crosses the portal level bench and has deeply gullied the material along the drainage path. The recent shaping of the waste dump material resulted in erodible surfaces that are not yet stabilized by vegetation. This has caused accelerated erosion of the dump and upper road, and transported increased amounts of sediment to the sedimentation pond. The sediment pond capacity and lower berms have not been maintained, however, and runoff now either

avoids the pond or flows from the pond. It appears that most sediment remains on site, but runoff water is not adequately controlled.” Exhibit 3 at p. 2. Notably, these inspections date from 2009, and no additional inspection of any kind is indicated in the DRMS files – nor any evidence of any work necessary to bring these mine sites into compliance.

Overall, the need for an updated stormwater permitting system, with meaningful water quality standards, effective monitoring and reporting, and verifiable compliance with corrective action is wholly justified.

“Minimize” Definition

The Division’s proposed change to the definition of “minimize” is appropriate. The new definition is consistent with both the recently updated non-extractive stormwater general permit as well as the EPA’s 2008 updated Multi-sector General Permit (MSGP). There does not appear to be a need to craft a specialized definition of “minimize” for the mining industry, as the current proposal already incorporates an industry-by-industry practice standard.

Effluent standards

Construction permit vs. Operational permit

The mining industry presents some unique issues with respect to stormwater controls, such that a distinction between construction activities and mining activities is less clear. Mine site construction includes some elements that continue forward throughout the life of the mine, making the need for a separate construction permit and a mining permit less appropriate. For instance, mine construction includes creation of waste rock dumps, ore pads, processing facilities, and soil stockpiles that will continue to be used and built upon during mining operations. Thus, with the mining sector in particular, it may make more sense to combine the construction and operational permitting into the same stormwater general permit.

Effluent Limitation Guidelines (ELG) vs. Practice-based standards

The distinction between application of ELG’s and Practice-based standards is an important one. ELG’s contain numeric limitation that better ensure protection of water quality, while practice-based standards impose only stormwater controls, without necessarily incorporating numerical limits. The Division should adopt an approach that recognizes the need for numerical limits, including ELG’s, to ensure compliance with all water quality standards. For instance, the Division should consider an approach that applies the appropriate ELG limitations and other appropriate numerical standards for any constituents of concern to those areas of a mine site that are disturbed as a result of exploration, construction, or mining activities, but rely on practice-based standards for undisturbed areas of a mine site. However, and in any case, the Division should still require monitoring for all discharges, including those subject to only practice-based standards to ensure that applicable water quality standards are met in the relevant receiving water. Where a mine site is shown to demonstrate a reasonable potential to discharge in excess of an applicable water quality standard, an individual permit should be encouraged in order to provide the site-specific attention necessary to protect against water quality standard violations.

For mine sites on stream segments already impaired for a constituent expected to be discharged from a mine site, with or without a developed TMDL, the Division should fully implement the Clean Water Act's requirements for ensuring that the discharge does not cause or contribute to an exceedance. Such a policy should include monitoring and application of defined numerical effluent limitations, which may require active treatment above and beyond best management practices or other practice-based standards.

Where a receiving water is identified as habitat for any threatened or endangered species, the Division should consider moving those discharges to an individual permit to ensure species protection. Short of this requirement, any such discharge should be subject to numerical limits to ensure compliance with water quality standards, with appropriate monitoring. Similarly, where a receiving water is subject to the anti-degradation provisions, terms and conditions, including numerical limits and monitoring requirements, should be incorporated to ensure protection of water quality. Overall, defined numerical limits and monitoring are essential to ensure that data is available to determine compliance with applicable water quality standards, including those necessary for species protection and anti-degradation requirements.

Monitoring, Reporting and Inspections

Monitoring of stormwater discharges is essential to ensure protection of water quality standards. Only through a data-driven system can the Division identify problems and focus on improving environmental outcomes, maximizing administrative efficiency in stormwater permitting and enforcement systems. The current mining stormwater general permit does not provide for any discharge monitoring. The revised permit should correct this problem. Data from monitoring is essential to allow the Division and the public to identify problem areas and thereby focus on improving environmental outcomes.

Benchmark sampling is an appropriate tool, providing a baseline from which the Division can assess site conditions, while offering flexibility for the industry. The current EPA MSGP requires the equivalent of four quarters of data as a benchmark, at which time monitoring requirements can be relaxed upon a demonstration of no reasonable potential for water quality violations. Such an approach is worth Division consideration, but for other sites where benchmark monitoring substantiates a potential problem meeting standards, discharge monitoring reports (DMR) are a necessary component of an effective stormwater program. Only through DMR compliance can the agency or the public effectively determine permit compliance and impacts on water quality. This data should be incorporated into the EPA database (ICIS). Reporting would also be enhanced through frequent updating and maintenance of Storm Water Management Plans (SWMP) to incorporate information on facility inventories, inspections and sampling, as well as corrective actions.

While the current mining stormwater general permit provides for inspections, these provisions should be enhanced. For instance, the once-every-three-years policy on inspections for so-called "inactive" sites should be reviewed to ensure that problems such as those identified above with West-Slope uranium mines are not allowed to occur. At minimum, inspections should occur with more frequency during construction activities at mines sites, and quarterly inspections with sampling should be conducted. For sites demonstrating a potential to exceed water quality standards, including on impaired waters, additional sampling and inspection (monthly) should be considered. Further, with respect to all mine sites, in order to ensure data exists upon which to

make reasonable assessments of site conditions and consistent with the non-extractive general permit, at least one inspection/sampling event per year should be conducted during the period of a runoff event.

Corrective Action

Corrective actions should be incorporated into the terms of the general permit, consistent with the EPA MSGP and the Colorado non-extraction general permit. In this way, Division enforcement resources are better directed to those operations that fail to correct or improperly implement corrections. Permittees that fail to pursue required corrective actions should be subject to separate violations for both the failure to correct and the underlying violation. This system puts a premium on compliance, and responsible operators can correct and move forward. While exemptions for natural background may be appropriate, the Division should firmly establish that any such exemption is available for truly “natural” conditions only. Impacts associated with prior disturbance, mining or otherwise, at a site should not form the basis of an exemption to comply with water quality standards and implement corrective action.

Active vs. Inactive vs. Abandoned Mines

The Division should consider clarifying that all mining operations with current DRMS permits outstanding and with existing disturbed land, are subject to stormwater permitting requirements. The Division should not allow mines that cease producing for a period of time to escape coverage in a permit. Sampling and inspections should still be required quarterly at all mine sites. The only exception should be for mines that are “abandoned”, such that no identifiable mine operator and/or no state or federal mining or exploration permits exist. Reclamation of abandoned mine sites by the DRMS should be encouraged.

Sincerely,

/s/ Jeffrey C. Parsons

Jeffrey C. Parsons



COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY MINERALS PROGRAM INSPECTION REPORT

PHONE: (970) 241-1117

RECEIVED
MAY 14 2008
Division of Reclamation,
Mining and Safety

GA

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance of the mining operation with the permit and the regulations of the Mined Land Reclamation Board. The report notes 1) Areas of successful compliance; 2) Problems and suggested corrective actions and/or 3) Possible violations to be considered for possible enforcement action by the Mined Land Reclamation Board. **OPERATORS SHOULD READ THIS REPORT CAREFULLY BECAUSE IT MAY REQUIRE CORRECTIVE ACTION AND/OR RESPONSES TO THE DIVISION IN ORDER TO AVOID CONSIDERATION OF POSSIBLE ENFORCEMENT ACTION BY THE MINED LAND RECLAMATION BOARD.**

MINE NAME: JD-8 Mine OPERATOR: Cotter Corporation
COUNTY: Montrose MINERAL: U / V TYPE OF OPERATION: Regular 112
INSPECTOR(S): Russ Means
MINE ID # OR PROSPECTING ID #: M-1984-014
INSPECTION DATE: 4-2-08 DATE OF COMPLAINT: N/A
INSPECTOR'S INITIALS: GRM TIME OF DAY (MILITARY): 1100
INSPECTION TYPE CODE⁽¹⁾: MI POST INSP. CONTACTS⁽²⁾: DOE
JOINT INSP. AGENCY CODE⁽²⁾: DOE REASON FOR INSP. CODE⁽³⁾: IE
WEATHER CODE⁽⁴⁾: CR BOND CALCULATION TYPE⁽⁵⁾: NN
OP. REP. PRESENT: Glenn Williams

1. INSPECTION TYPE CODE - [CL-IN: IL = Illegal Operation, MI = Monitoring, MP = Mineral Prospect, SI = Surety-related, PR = Pre-operation]
2. POST INSPECTION CONTACTS AND JOINT INSPECTION AGENCY CODE - [CL-AG: NO = None, BL = BLM, CH = Colo. Dept. Health; CL = Land Board, CT = Citizen; CW = Wildlife, FS = Forest Service, HW = Hwy. Dept., LG = Local Government, SE = State Engr.]
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4. WEATHER CODE - [CL-WE: CL = Cloudy, CR = Clear, IN = Inclement - prevented inspection, RN = Raining, SN = Snowing, WD = Windy]
5. BOND CALCULATION TYPE - [BC = Complete Bond, BP = Partial Bond, NN = None]

This list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each. **IF PB OR PV IS INDICATED, YOU SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF YOUR PERMIT AND APPLICABLE RULES AND REGULATIONS.** If PV is indicated, you will be notified under separate cover when the Mined Land reclamation Board will consider possible enforcement action.

GENERAL INSPECTION TOPICS

(AR) RECORDS.....	<u>Y</u>	(FN) FINANCIAL WARRANTY.....	<u>N</u>	(RD) ROADS.....	<u>Y</u>
(HB) HYDROLOGIC BALANCE.....	<u>NA</u>	(BG) BACKFILL & GRADING.....	<u>NA</u>	(EX) EXPLOSIVES.....	<u>NA</u>
(PW) PROCESSING WASTE/TAILING.....	<u>NA</u>	(SF) PROCESSING FACILITIES.....	<u>NA</u>	(TS) TOPSOIL.....	<u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE...	<u>PB</u>	(FW) FISH & WILDLIFE.....	<u>NA</u>	(RV) REVEGETATION.....	<u>N</u>
(SM) SIGNS AND MARKERS.....	<u>Y</u>	(SP) STORM WATER MGT PLAN...	<u>PB</u>	(SB) COMPLETE INSP.....	<u>Y</u>
(ES) OVERBURDEN/DEV. WASTE.....	<u>Y</u>	(SC) EROSION/SEDIMENTATION..	<u>Y</u>	(RS) RECL PLAN/COMP...	<u>Y</u>
(AT) ACID OR TOXIC MATERIALS.....	<u>Y</u>	(OD) OFF-SITE DAMAGE.....	<u>Y</u>	(ST) STIPULATIONS.....	<u>NA</u>

Y = Inspected and Found in Compliance

PV = Inspected and Possible Violations Noted

PB = Inspected and Problems Noted

N = Not Inspected

NA = Not Applicable

MINE ID # OR PROSPECTING ID #: M-1984-014
INSPECTION DATE: 4-2-08

INSPECTOR'S INITIALS GRM

OBSERVATIONS

This inspection was conducted as part of the normal monitoring program established by the Colorado Division of Reclamation, Mining and Safety for permitted sites. The JD-6 is a regular 110(2) permitted site for an underground uranium mining operation. Cotter Corporation holds the Department of Energy (DOE) Lease for the JD-6 Tract. Glen Williams from Cotter and Dan Burns from the DOE accompanied the inspector on site.

The mine identification sign and affected area boundary markers are in place and in compliance with Rule 3.1.12. The sign is located on the County Road where it enters the permit boundary. Permit boundaries are marked by t-posts that are visible.

The mine is back in stand-by status after reactivation and a short time in production. The inspector notes ore is still stockpiled on site at this time. A large portion of the stockpile has been removed or replaced back in the mine per the Division's request. It is understood that there is no place to move the stockpile to that would not create a problem elsewhere. After review and discussions the Division request that a berm be built around the entire stockpile to prevent any accident run-on or run-off from the area regardless of current grading. The issue of ore stockpile design is being noted as a problem under the mining plan with a corrective action date at the end of this report.

The inspector notes some equipment is being stored on site. No major leaks of fuels or oils were noted. The fuel storage tank is noted as being empty and all mine buildings are secure and in good repair.

Stormwater controls for the permit area are a series of bar ditches and berms. The inspector notes that the ditches and grading have directed most of the stormwater into a make shift retention pond at the base of the waste dump. Rilling and other markers indicate that drainage is running down the main roads. A review of the permit indicates no formal stormwater control plans. The inspector, DOE and Cotter agreed that bar ditches should be placed on haul and access roads to keep stormwater moving towards the retention and sedimentation pond. The issue of stormwater control is listed as a problem with a corrective action date at the end of this report. It is important to note that prior to any reactivation the Division will require a Technical Revision that addresses a permit wide stormwater control engineered to contain the 10 yr /24 hour event and must safely pass a 100 yr/24 hr event. This plan can be reviewed and approved while the mine is on stand-by which will result in no delays when resumption of production is contemplated.

The portal is noted as being secured by locked gate in good repair.

Topsoil is stockpiled just north of the mine office on the lower bench. Natural vegetation appears to be coming back on the pile. In the new dump area where much of the topsoil was removed from around boulders volunteer vegetation is also being reintroduced. This area will require some monitoring and should vegetation not come in as well as expected the operator will need to seed the area.

The bond for the site was recalculated in 2002. Based on current conditions the bond appears adequate as the total proposed disturbance has not yet been achieved. Other factors include the pending decision on DMO status which could impact the reclamation liability as well. If these issues are not resolved by the next annual inspection an update will be done.

No other issues are noted at this time.

MINE ID # OR PROSPECTING ID #: M-1984-014

INSPECTION DATE: 4-2-08

INSPECTOR'S INITIALS GRM

Responses to this inspection report should be directed to Russ Means at the Division of Reclamation, Mining and Safety, Grand Junction Field Office, 101 South 3rd Street, Room 301, Grand Junction, Colorado 81501, phone no. 970-241-1117.

I & E Contact Address

NAME: Glen Williams

OPERATOR: Cotter Corporation

STREET: PO Box 700

CITY/STATE/ZIP: Nucla, CO 81424

cc:

- ☐ CE
- ☒ DOE
- ☐ FS
- ☐ HW
- ☐ HMWMD (CH)
- ☐ WQCD (CH)
- ☐ OTHER

MINE ID # OR PROSPECTING ID #: M-1984-014

INSPECTION DATE: 4-2-08

INSPECTOR'S INITIALS GRM

The following problems (PB) and/or possible violations (PV) (and suggested corrective actions) were identified during this inspection. The problems should be corrected by the dates given, or they will become possible violations. The possible violations should be corrected by the dates given to reduce their severity when considered by the Mined Land Reclamation Board. The inspector noted on the previous page should be notified of all corrective actions taken.

PROBLEMS/POSSIBLE VIOLATIONS
AND
CORRECTIVE ACTIONS

1. Ore storage stockpile area is unconfined.

CORRECTION
DATE
7 / 01 / 08

PB or PV: PB

TOPIC(S): MP

Corrective Action:

A berm should be constructed to prevent access to the ore stockpile area and prevent
stormwater issues. Please provide photo documentation of compliance.

2. Stormwater controls are marginally preventing off site impacts.

7 / 01 / 08

PB or PV: PB

TOPIC(S): SP

Corrective Action:

Interim measures need to be constructed as noted by the corrective date. Please provide photo
documentation of compliance. It is highly recommended that Cotter begin a Technical Revision
to address a comprehensive stormwater control plan for the site as described in the report.

I, G. Russell Means, hereby certify that on May 7, 2008, I deposited a true and complete copy of this foregoing inspection report in the United States Mail, first class postage paid, to the operator of record for this site at the address indicated, and to those others within the body of this report who have been designated to receive copies (DMG personnel excepted).

Signature



**RECEIVED**

JUN 22 2009

**COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY
MINERALS PROGRAM INSPECTION REPORT**

PHONE: (303) 866-3567

**Division of Reclamation,
Mining and Safety**

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance of the mining operation with the permit and the regulations of the Mined Land Reclamation Board. The report notes 1) Areas of successful compliance; 2) Problems and suggested corrective actions and/or 3) Possible violations to be considered for possible enforcement action by the Mined Land Reclamation Board. OPERATORS SHOULD READ THIS REPORT CAREFULLY BECAUSE IT MAY REQUIRE CORRECTIVE ACTION AND/OR RESPONSES TO THE DIVISION IN ORDER TO AVOID CONSIDERATION OF POSSIBLE ENFORCEMENT ACTION BY THE MINED LAND RECLAMATION BOARD.

MINE NAME: Burros MineOPERATOR: Gold Eagle Mining, Inc.COUNTY: San MiguelMINERAL: UraniumTYPE OF OPERATION: U/G, 110(2)INSPECTOR(S): Bob OswaldMINE ID # OR PROSPECTING ID #: M-1977-297*Bob Oswald 6/17/09*INSPECTION DATE 6/3/09DATE OF COMPLAINT NAINSPECTOR'S INITIALS RCOTIME OF DAY (MILITARY) 12:00INSPECTION TYPE CODE⁽¹⁾ MIPOST INSP. CONTACTS⁽²⁾ BL, DOEJOINT INSP. AGENCY CODE⁽²⁾ BL, DOEREASON FOR INSP. CODE⁽³⁾ IEWEATHER CODE⁽⁴⁾: CLBOND CALCULATION TYPE⁽⁵⁾: BCOPERATOR REP. PRESENT: Don Coram

1. INSPECTION TYPE CODE - [CL-IN: IL=Illegal Operation, MI=Monitoring, MP=Mineral Prospect, SI=Surety-related, PR=Pre-operation]
2. POST INSPECTION CONTACTS AND JOINT INSPECTION AGENCY CODE - [CL-AG: NO=None, BL=BLM, CH=Colo. Dept. Health; CL=Land Board, CT=Citizen; CW=Wildlife, FS=Forest Service, HW=Hwy. Dept., LG=Local Government, SE=State Engr.]
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4. WEATHER CODE - [CL-WE: CL=Cloudy, CR=Clear, IN=Inclement - prevented inspection, RN=Raining, SN=Snowing, WD=Windy]
5. BOND CALCULATION TYPE CODE - [BC=Complete Bond, BP=Partial Bond, NN=None]

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GENERAL INSPECTION TOPICS

(AR) RECORDS.....	<u>Y</u>	(FN) FINANCIAL WARRANTY.....	<u>Y</u>	(RD) ROADS.....	<u>Y</u>
(HB) HYDROLOGIC BALANCE.....	<u>Y</u>	(BG) BACKFILL & GRADING.....	<u>NA</u>	(EX) EXPLOSIVES.....	<u>NA</u>
(PW) PROCESSING WASTE/TAILINGS.....	<u>NA</u>	(SF) PROCESSING FACILITIES.....	<u>NA</u>	(TS) TOPSOIL.....	<u>NA</u>
(MP) GENL MINE PLAN COMPLIANCE.....	<u>NA</u>	(FW) FISH & WILDLIFE.....	<u>Y</u>	(RV) REVEGETATION.....	<u>NA</u>
(SM) SIGNS AND MARKERS.....	<u>Y</u>	(SP) STORM WATER MGT PLAN...	<u>PB</u>	(SB) COMPLETE INSP.....	<u>N</u>
(ES) OVERBURDEN/DEV. WASTE.....	<u>Y</u>	(SC) EROSION/SEDIMENTATION ..	<u>PB</u>	(RS) RECL PLAN/COMP	<u>Y</u>
(AT) ACID OR TOXIC MATERIALS.....	<u>N</u>	(OD) OFF-SITE DAMAGE.....	<u>NA</u>	(ST) STIPULATIONS.....	<u>NA</u>

Y=Inspected and Found in Compliance PV=Inspected and Possible Violations Noted PB=Inspected and Problems Noted
N = Not Inspected NA = Not Applicable

ORIGINAL - Public File

MINE ID # OR PROSPECTING ID # M-1977-297
INSPECTION DATE 6/3/09

INSPECTOR'S INITIALS RCO

OBSERVATIONS

This partial inspection was performed by the Division as part of its monitoring of Hard Rock/Metals 110(2) permits. The operator was contacted to arrange a time for the scheduled inspection. The operator's representative named on page one was present during the inspection. Also present during the inspection were Dan Burns and Kyle Turley, both of US DOE (the site is largely located on US DOE lease tract CSR-13), and Helen Mary Johnson and Joel Hartman, both of BLM (the northern edge of the site is on BLM-managed land). This was a partial inspection since the Burro 7 area was not inspected.

The site was not active at the time of the inspection, and has not been active for several years. There was a permit ID sign posted on the ore bin near the lower portal. There are numerous pre-law mining features in the vicinity of this permit, which are not included in the permit area. (This includes the features at the Burro 3 claim: a vent shaft that has re-opened presenting a hazard, and a runoff containment berm that is eroding and causing a failing dump slope. The erosion on the Burro 3 is above and outside the permitted area, but is affecting the onsite stormwater and sediment control in the permit area.)

The permit area includes a lower portal, ore bin and large waste dump; a road leading to the Burro 5 and Burro 7 mine features (permitted road corridor is 50-60 feet wide, according to the 1994 SWMP map); a vent shaft along the road, enclosed in a security fence; areas for several upland stormwater control structures; Burro 5 dump and vent shaft plus steel buildings and generator/compressor location; Burro 7 dump, headframe, ore bin and vent shaft on and near the Burro 7 claim; and (according to the 1984 affected area map) location of the change/dry building. Several areas of the permit have been reclaimed, including the Burro shaft (backfilled), Burro 7 shaft (backfilled), change/dry building (demolished), access road between Burro 5 and Burro 7 (recontoured and revegetated). None of these items have been removed from the permit area, though the associated reclamation costs may have been removed from the bond amount. If the operator wishes to request release of any fully reclaimed areas, please follow the steps described in Hard Rock Rule 4.17.)

The permit boundary is irregular and would be difficult to completely mark, but since much of the permit is located on hill slopes providing the potential for sedimentation, erosion, sloughing, or expansion from earthwork, it is essential that portions of it must be marked prior to re-starting any activity. Specifically, the dumps and SWMP areas must be marked in a durable and visible manner. This is not a problem at this time.

The lower portal has been cleared of muck, and is secured by a locked steel grate. The portal was dry. The lower dump contains some wood cribbing and steel debris. Drainage control from the portal and dump areas appears adequate. The lower segment of the road (near the county road) has been modified by grading to retain stormwater runoff that is not being adequately contained in the upland areas of the permit. No runoff is reaching the county road, but the temporary berms are not engineered and may reach capacity soon. The upper areas of the permit are being severely eroded, including breaching of the berms, sediment filling the retention ponds, road berms overtopped, roadbed gullied deeply, culverts clogging, and possible increased erosion of natural drainages below the roads and dumps. The former operator had a SWMP from CDPHE/WQCD, and it is assumed that the present operator also has one. It does not matter that there is no mining activity at the site; the operator must monitor and maintain adequate drainage and erosion controls, by complying with the current SWMP if one exists. Failure to provide adequate controls will result in further onsite and offsite deterioration. The lack of functioning drainage controls on the site is noted as a problem in this report. The corrective action is that the operator must provide evidence of rebuilding adequate stormwater controls and evidence of compliance with the SWMP. See the last page for the correction date. (If the operator wishes to construct or install different structures than what is presently approved for the site, it may be necessary to obtain a permit revision.)

There were no stockpiles of ore or topsoil, no mining equipment, no noxious weeds and no hydrocarbons or contaminants noted. The US DOE holds a bond for the operator's activities on this lease tract. The reclamation costs will be reviewed and the new figures will be sent to the operator.

No further items were observed during the inspection. Responses to this inspection report should be directed to this inspector at the Division of Reclamation, Mining and Safety, 691 County Road 233, Suite A-2, Durango, Colorado 81301. **(Please note: As of 7/1/08 the Durango Field Office moved to the new address, shown above. Please revise your records as necessary.)**

MINE ID # OR PROSPECTING ID # M-1977-297
INSPECTION DATE 6/3/09

INSPECTOR'S INITIALS RCO

Cont.

I & E Contact Address

NAME Don Coram
OPERATOR Gold Eagle Mining, Inc.
STREET 845 E Main St.
CITY/STATE/ZIP Montrose CO 81401

cc: Steve Shuey, DRMS

- ☐ CE
- ☐ BL
- ☐ FS
- ☐ HW
- ☐ HMWMD (CH)
- ☐ SE
- ☐ WQCD (CH)
- ☐ OTHER

Cc: Ed Cotter, US DOE, 2597 B3/4 Rd., Grand Junction CO 81503
Helen Mary Johnson, BLM, 15 Burnett Ct., Durango CO 81301
CDPHE/WQCD, 4300 Cherry Creek South Dr., Denver CO 80222

MINE ID # OR PROSPECTING ID # M-1977-297
INSPECTION DATE 6/3/09

INSPECTOR'S INITIALS RCO

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PROBLEMS/POSSIBLE VIOLATIONS
AND
CORRECTIVE ACTIONS

CORRECTION
DATE

1. There is a lack of adequate stormwater control and the site is eroding.

CORRECTIVE ACTION: The operator must provide evidence to this office of a current and adequate stormwater management plan, and provide evidence of performing the onsite construction of the necessary runoff and erosion control structures. The operator must provide evidence of completing these activities to the Division by the date shown at right.

9/1/09
PB or PV: PB
TOPIC(S): SP
SC, _

2. None.

CORRECTIVE ACTION: NA

PB or PV:
TOPIC(S):
_

CERTIFICATE OF SERVICE

I, Bob Oswald, certify that I mailed a true and complete copy of the foregoing inspection report to the persons designated herein to receive copies, at their addresses of record, by depositing them postage paid with the US Postal Service, on the signature date shown below.

(signature)

(date)



COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY
MINERALS PROGRAM INSPECTION REPORT
PHONE: (303) 866-3567

RECEIVED

JUN 19 2009

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance of the mining operation with the permit and the regulations of the Mined Land Reclamation Board. The report notes 1) Areas of successful compliance; 2) Problems and suggested corrective actions and/or 3) Possible violations to be considered for possible enforcement action by the Mined Land Reclamation Board. OPERATORS SHOULD READ THIS REPORT CAREFULLY BECAUSE IT MAY REQUIRE CORRECTIVE ACTION AND/OR RESPONSES TO THE DIVISION IN ORDER TO AVOID CONSIDERATION OF POSSIBLE ENFORCEMENT ACTION BY THE MINED LAND RECLAMATION BOARD.

MINE NAME: Hawkeye Mine OPERATOR: Gold Eagle Mining Inc.
COUNTY: San Miguel MINERAL: Uranium-Vanadium TYPE OF OPERATION: U/G, 110(2)
INSPECTOR(S): Bob Oswald
MINE ID # OR PROSPECTING ID #: M-1978-311 *Bob Oswald 6/15/09*
INSPECTION DATE 6/2/09 DATE OF COMPLAINT NA
INSPECTOR'S INITIALS RCO TIME OF DAY (MILITARY) 10:00
INSPECTION TYPE CODE⁽¹⁾ MI POST INSP. CONTACTS⁽²⁾ DOE
JOINT INSP. AGENCY CODE⁽²⁾ BL,DOE REASON FOR INSP. CODE⁽³⁾ IE
WEATHER CODE⁽⁴⁾: CR BOND CALCULATION TYPE⁽⁵⁾: BP
OPERATOR REP. PRESENT: Don Coram

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GENERAL INSPECTION TOPICS

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(HB) HYDROLOGIC BALANCE.....	<u>Y</u>	(BG) BACKFILL & GRADING.....	<u>Y</u>	(EX) EXPLOSIVES.....	<u>NA</u>
(PW) PROCESSING WASTE/TAILINGS.....	<u>NA</u>	(SF) PROCESSING FACILITIES.....	<u>NA</u>	(TS) TOPSOIL.....	<u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE.....	<u>Y</u>	(FW) FISH & WILDLIFE.....	<u>N</u>	(RV) REVEGETATION.....	<u>PB</u>
(SM) SIGNS AND MARKERS.....	<u>Y</u>	(SP) STORM WATER MGT PLAN.....	<u>PB</u>	(SB) COMPLETE INSP.....	<u>Y</u>
(ES) OVERBURDEN/DEV. WASTE.....	<u>Y</u>	(SC) EROSION/SEDIMENTATION.....	<u>Y</u>	(RS) RECL PLAN/COMP.....	<u>NA</u>
(AT) ACID OR TOXIC MATERIALS.....	<u>Y</u>	(OD) OFF-SITE DAMAGE.....	<u>NA</u>	(ST) STIPULATIONS.....	<u>NA</u>

Y=Inspected and Found in Compliance PV=Inspected and Possible Violations Noted PB=Inspected and Problems Noted
N = Not Inspected NA = Not Applicable

ORIGINAL - Public File

MINE ID # OR PROSPECTING ID # M-1978-311
INSPECTION DATE 6/3/09

INSPECTOR'S INITIALS RCO

OBSERVATIONS

This inspection was performed by the Division as part of its monitoring of Hard Rock and Metals 110(2) permits. The operator was contacted about the inspection, and a time was arranged to meet. The operator's representative named on page one was present during the inspection. Also present during the inspection were Dan Burns and Kyle Turley, both from US DOE (permit area is located on US DOE lease tract CSR-13).

The site was not active during the inspection, and has not been active for several years. Most recent activity has been earthwork performed for reclamation of the waste dump. The waste dump material was pulled away from the cliff and shaped with a rough surface and adequate gradient. It was seeded several years ago, but vegetation is still sparse. The dump material is in its final location, and should be monitored for revegetation success and erosional stability.

In the past, stormwater has been adequately conveyed and managed on the site, but the control structures are now in need of repair. Upland drainage runs onto the permit, crosses the portal level bench and has deeply gullied the material along the drainage path. The recent shaping of the waste dump material resulted in erodible surfaces that are not yet stabilized by vegetation. This has caused accelerated erosion of the dump and upper road, and transported increased amounts of sediment to the sediment pond. The sediment pond capacity and lower berms have not been maintained, however, and runoff now either avoids the pond or flows from the pond. It appears that most sediment remains onsite, but runoff water is not adequately controlled. This is noted as a problem in this report. The corrective action is that the operator must rebuild the necessary stormwater runoff control structures, including riprap, berms and the sediment pond (probably detailed in his SWMP plan), and provide evidence to this office of such timely action. See the last page for the correction date. (The operator is reminded that regular monitoring and maintenance of these structures is necessary.)

The lower portions of the site (below the waste dump, ramp road, and ore bin) especially in and near the sediment pond, exhibit an infestation of Russian knapweed and tamarisk. These are State-listed noxious weeds and are required to be controlled. The patches are fairly small (total area about 1000 sf) and must be treated this season and regularly until they are eliminated. The operator was aware of the weeds, partly due to having a recently updated weed map from US DOE, and from the weed control requirement under the US DOE lease agreement. He stated that he has a weed control plan and that weed treatment was scheduled to be performed this season. The DRMS permit file does not contain a copy of the weed control plan, though one should be made part of this permit. The presence of these noxious weeds, and the lack of a written weed control plan in the permit, are noted as a problem in this report. The corrective action is that the operator must treat the weeds in a timely manner this season and provide evidence of the treatment, and to revise the DRMS permit to include the weed control plan. See the last page for the correction date. (There is no fee for the technical revision for the weed control plan. The weed control plan should include input from the US DOE and/or the San Miguel County weed control office.)

The operator stated that this site will not be actively mined, but the portal will be needed as a secondary escapeway for the nearby Ellison Mine (permit M-1978-342, also permitted to this operator), therefore this DRMS permit must continue to remain active. Presently there is a welded steel bat grate anchored to the opening, which will eventually be modified to allow egress. Outstanding reclamation tasks and ongoing maintenance tasks include maintaining a safeguarded portal and stable access to the portal, monitoring and maintaining stormwater drainage controls, revegetation and weed control. This office will verify the amount of bond posted to the US DOE and to DRMS, to ensure that sufficient bond exists for this permit.

No further items were observed during the inspection. Responses to this inspection report should be directed to this inspector at the Division of Reclamation, Mining and Safety, 691 County Road 233, Suite A-2, Durango, Colorado 81301. **(Please note: As of 7/1/08 the Durango Field Office moved to the new address, shown above. Please revise your records as necessary.)**

Cont.

MINE ID # OR PROSPECTING ID # M-1978-311
INSPECTION DATE 6/3/09

INSPECTOR'S INITIALS RCO

I & E Contact Address

NAME Don Coram
OPERATOR Gold Eagle Mining Inc.
STREET 845 E Main St.
CITY/STATE/ZIP Montrose CO 81401

cc: Steve Shuey, DRMS

- ☐ CE
- ☐ BL
- ☐ FS
- ☐ HW
- ☐ HMWMD (CH)
- ☐ SE
- ☐ WQCD (CH)
- ☐ OTHER

Ed Cotter, US Dept of Energy, 2597 B3/4 Road, Grand Junction, CO 81503

MINE ID # OR PROSPECTING ID # M-1978-311
INSPECTION DATE 6/3/09

INSPECTOR'S INITIALS RCO

The following problems (PB) and/or possible violations (PV) (and suggested corrective actions) were identified during this inspection. The problems should be corrected by the dates given, or they will become possible violations. The possible violations should be corrected by the dates given to reduce their severity when considered by the Mined Land Reclamation Board. The inspector noted on the previous page should be notified of all corrective actions taken.

PROBLEMS/POSSIBLE VIOLATIONS
AND
CORRECTIVE ACTIONS

- | | <u>CORRECTION</u>
<u>DATE</u> |
|---|--|
| 1. Stormwater runoff and gulch erosion are occurring without the proper structures in place to control them.

<u>CORRECTIVE ACTION:</u> The operator must (re)install the necessary control structures to minimize the erosion and sediment transport. Evidence of this construction must be received by this office by the date shown at right. | <u>9/1/09</u>
PB or PV: <u>PB</u>
TOPIC(S): <u>SP</u>
—, —, |
| 2. The site contains noxious weeds and there is no weed control plan in the permit.

<u>CORRECTIVE ACTION:</u> The operator must submit a technical revision (TR) to address the need for an adequate weed control plan, and must treat the weeds this season and provide evidence of this treatment. <u>The TR and the evidence of the first treatment must be received at this office by the date shown at right.</u> | <u>9/1/09</u>
PB or PV: <u>PB</u>
TOPIC(S): <u>RV</u>
—, —, |

CERTIFICATE OF SERVICE

I, Bob Oswald, certify that I mailed a true and complete copy of the foregoing inspection report to the persons designated in this report to receive copies, at their addresses of record, by depositing them postage paid with the US Postal Service, on the signature date shown below.

Bob Oswald (signature)

6/15/09 (date)

From: Jeffrey Cheng [<mailto:jcheng@aesci.com>]
Sent: Thursday, August 16, 2012 5:02 PM
To: kathleen.rosow@state.co.us
Cc: 'Me'; Zuber, Rob
Subject: FW: Stormwater Management Written input

Kathy:

On August 1st, I attended the meeting held by CDPHE regarding new criteria for mining stormwater management in Colorado. Given my expertise in the field of stormwater management, my opinions and suggestions regarding the new criteria were requested. I am more than happy to provide technical assistance on this issue.

I believe that the standards developed by CWCB and UDFCD Volume III are valuable guidelines for the basis of stormwater management. UDFCD standards are held quite high because of the consideration for the urban area. Thus, I believe the new criteria for mining stormwater management should be equal to or lower than the standards provided by UDFCD.

<http://cwcw.state.co.us/technical-resources/floodplain-stormwater-criteria-manual/Pages/main.aspx>

http://www.udfcd.org/downloads/down_critmanual.htm

One of my concerns is that the 72 hour requirement for an inspection following a stormwater event is not a sufficient amount of time. Through my experiences on the job site, I have observed that the watershed is not stable after a storm event, especially at high country areas. Indeed, I experienced some mud slides that blocked the road and prevented access for an inspection. To consider the stormwater inspector's safety and the efficiency of the inspection, we suggest that this time frame be extended from 72 hours to 108 hours to allow the inspected basin to stabilize and provide a safer amount of travel time.

The second criteria I am concerned about is the stormwater discharge sample that will be required after each stormwater event. I don't believe it to be necessary or plausible to obtain an accurate sample from every site and after every event. Obtaining these samples will require a tremendous amount of man power and will make data management difficult. The proposed water quality standards should be based on the job site's best management practices (BMP). The stormwater quality BMP approach has been widely applied in Denver urban areas for many years, and has been accepted by EPA as an acceptable practice. Mine sites and urban areas have different hydrological conditions, and therefore each mine site's should have their own stormwater quality criteria. **An example of this concept is illustrated in the two images below.**

Illustrated in the Image 1 (below) is a sample of urban stormwater that has been collected and treated on a stormwater quality pond.



Illustrated in Image 2 (below) is a sample of water from a storm event that occurred on a natural stream. This water fails to meet the ELG criteria. This comparison illustrates that water quality standards should be based on individual watershed's hydrological/hydraulic condition and not just a uniform criteria such as 0.1 mg/l for the TSS.



I has extensive experience in stormwater manual creation/modification, including the City of Aurora's stormwater criteria, the City of Aspen's stormwater quality criteria, and UDFCD Volume III BMP sections. I was also involved with Taiwan, China and South Korea's stormwater criteria review and modification.

Please feel free to contact me with any questions or feedback. I am happy to help with the improvements of this program.

Sincerely,

Jeffrey Yen Cheng, Ph.D., P.E.

Advanced Environmental Sciences, Inc.

383 West 37th St., Suite 104

Loveland, CO 80538

1. There are several General Permit assumptions that do not apply to many of the mine sites within Colorado. A summary of site specific characteristics that need to be accommodated include:
 - a. The size of the site: many exploration level sites are smaller than five acres.
 - b. Many occur on historic mine sites being explored to determine presence/absence of existing ore. Thus the 'surfaces' are well weathered and likely release little to no stormwater concerns.
 - c. Access to these sites is often very limited to 4WD roads. Being able to respond to a stormwater event is very difficult.
 - d. Access to these sites is often seasonable and limited to late spring → summer → early fall.
 - e. Exploration and small mine operations are economically streamlined. The proposed stormwater sampling and analysis poses another financial burden to these operations.In summary, consideration regarding size, historic use, access and activity should be a part of the permit design and decision process. Small operations pursuing exploration, or small scale mining should be assigned an Individual permit with less stringent sampling and bmp requirements.
2. The CDPHE stormwater permit process for metal mining does not seem to acknowledge the existing surface water sampling REQUIRED by the Division of Reclamation and Mine Safety (DRMS). Each mine operation (at a minimum) must establish baseline water quality conditions within the watershed with five quarters of sampling. Once operations commence, the DRMS requires continued sampling that is site specific (ie. Annual sampling vs bimonthly etc. depending upon the magnitude of the operation). It seems the stormwater sampling requirements could be addressed in part – by the required DRMS surface water sampling. The two agencies need to coordinate their requirements so as to minimize duplicity and consolidate requirements in order to eliminate as much regulatory burden as possible.
3. The assumption that any site requiring a CDPS permit automatically is assumed to need a 'General Stormwater Permit' is an overly conservative assumption. As stated in comments 1 and 2 above; many of these sites are small, inaccessible and scaled down to minimal operational status. To assume that 'discharges still occur' and need to be controlled or sampled is unrealistic. The stormwater permit requirements need to be scaled in response to the size and scale of mine site operations.

Provided by: Karmen King/Grayling LLC
18032 Rd G, Cortez CO 81321
(970) 565-0278
kking@aquatox.us.



SQUIRE SANDERS (US) LLP

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August 17, 2012

Kathy Rosow
Permits Section
Water Quality Control Division
4300 Cherry Creek Drive South
Denver, CO 80246

RE: General Permit Renewals for Stormwater Discharges Related to Mining

Dear Kathy:

Thank you for hosting the August 1, 2012 meeting to discuss issues that may arise in connection with your renewal and significant revisions to the mining general permits (COR040000 and COG850000). The Water Quality Control Division ("Division") commented that it is taking a new approach to these stormwater mining permits. A summary of my comments on the Division's permitting proposal as outlined at the meeting are set forth below.

1. **Limits on coverage:** The permits may separate the process water from the stormwater discharges. Although these waters may not necessarily be covered in the same permit, the permits need to be considered simultaneously to avoid duplication, overlap and inconsistencies.

2. **Effluent Limitations:** The Division has proposed that practice-based effluent limitations would be incorporated. Practice based effluent limitations are listed, however, the one limit that would merit further evaluation is "sector specific practice based effluent limits". Because these limits would particularly relate to the specific types of mines, materials and practices, these may be the most appropriate.

3. **Minimization:** The Division proposes that a definition be added for "minimize" as it relates to effluent discharges. "Reduce and/or eliminate to the extent achievable using control measures that are technologically available and economically practicable and achievable in light of best industry practice". This definition of minimize goes beyond what would be considered as minimization practices. It would direct the elimination of the discharge. Best industry practiced may not reflect whether such practices are achievable in certain climates and remote areas. For example, many mining sites are located in remote areas and would have difficulty in implementing industry practices that may be suitable elsewhere. While practices may be technologically achievable and in some areas economically achievable, it is not certain that these same practices would be technologically achievable and economically achievable for

all sites. This definition needs to include consideration of site characteristics as it relates to the minimization of effluent discharges.

4. **Water Quality Based Effluent Limitations:** The Division has proposed a narrative water quality based effluent limit, to wit “Stormwater discharges authorized under this permit must be controlled as necessary to meet applicable quality standards.” The presumption when the Division issues a permit is that the limits and practices are included in the permit to attain applicable water quality standards. By including this water quality based effluent limit, the Division would be delegating to others the power to determine whether standards are not being met and whether that should result in a permit violation. This is not acceptable. The provisions could immediately trigger a violation if water quality standards were exceeded. As you know, many factors may affect or cause the exceedence of water quality standards and dischargers may or may not be the cause. However, if this term is adopted, it would be easy to immediately allege that the mining discharge is in violation and put the burden on the mine to prove that actually they are not causing the exceedence. This narrative water quality based effluent limits should not be included in the general permits.

As I noted at the meeting, discharge permits have served as a shield to actions by third parties. To the extent the permittee discloses that certain constituents are likely contained in the effluent or processed waters, it shields the permittee that is in compliance with their permit from alleged actions by third parties. Including this narrative limit in the permit would destroy the “permit as a shield” protection because it would allow third parties to automatically seek enforcement of permit term if water quality standards in receiving waters are exceeded regardless of the source or the constituent.

5. **WQBEL:** The Division listed potential pollutants of concern including SAR, EC, and WET. SAR and EC are only appropriate for waters that are actually used for irrigation of crops. The adoption of a limit for SAR and EC is incredibly site specific since it depends upon whether the water reaches downstream diversions for irrigation and the specific crops irrigated at that site. A general term for SAR and EC would not be applicable universally.

The WET test would only be an acute WET test because most of the receiving streams are intermittent and would not support aquatic life for the period of time of a chronic WET test. It is not likely that many of these streams will have flow or continuous flow during a seven day period, so do not support the types of aquatic life that would be reflected in a chronic WET test. As you know, many of these streams are stormwater dependent. During stormwater flows, the water quality comes from many sources and is high volume and short term.

6. **TMDL Requirements for Impaired Waters:** If the water to which a mining general permittee discharges is listed on the 303(d) list as impaired, this should not preclude authorization under the general permit. For example, in some circumstances, such as E-coli impairment it is not likely that mining operations would add any E-coli. Additionally, many mines are continuing discharges and should be allowed to continue their discharges at the historic levels.

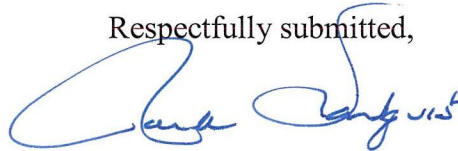
7. **Inspections:** During the meeting, there was discussion about the number of inspections of these mining sites. The Division of Reclamation Mining and Safety ("DRMS") frequently inspects the mining sites. The Division now proposes that mines would be inspected by the Division at least twice per year. Many of the operations that are conducted at the mines are under DRMS programs which address issues such as the installation of stormwater facilities, the operations of those facilities and the reclamation of mine site. I am pleased that representatives from DRMS attended the meeting and provided comments. Comments were made that the Division should use the DRMS inspectors to inspect the stormwater facilities. Simple training could be provided to these qualified and experienced inspectors to highlight issues that may be associated with stormwater permits. This would reduce the cost not only to the state but also to the permittees. It is an important and appropriate cost saving measure for the two agencies to coordinate especially when there inspections are likely to overlap. It will also preclude the likelihood that a DRMS inspection and a Division inspection of the waters at the same mine could be inconsistent.

8. **Corrective Action Stormwater Discharges:** The Division is proposing corrective action requirements and discussed the triggers for correction action. A permittee should be exempt from corrective action if the source is natural background, upstream water quality, other sites or irreversible human caused impacts. They should be exempt if there is no technologically feasible or practical treatment technology exists that would be suitable for the mine.

9. **Process Water v. Stormwater:** The Division and DRMS do not have consistent definitions for abandoned mines, inactive mines, and active mines. The program will be benefited if the definitions used by both agencies that relate to mines are consistent. We are pleased that the Division indicated that they will work with DRMS on the proposed definitions and mining terms.

I request that you consider and incorporate these comments as you prepare the draft permits.

Respectfully submitted,



Ronda L. Sandquist.

RLS/maa

cc: Janet Kieler
Abigail Ogbe



TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC.

HEADQUARTERS: P.O. BOX 33695 DENVER, COLORADO 80233-0695 303-452-6111

August 17, 2012

Ms. Kathy Rosow
Water Quality Control Division
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, CO 80246-1530

RE: Pre-Public Notice Comments on Renewal of CDPS General Permits COG-850000 (Coal Mining Process Water and Stormwater Combined) and COR-040000 (Metal Mining Stormwater and Coal Mining Stormwater)

Dear Ms. Rosow:

Tri-State Generation and Transmission Association, Inc. (Tri-State) attended the August 1, 2012 Pre-Public Notice Stakeholder Meeting, and reviewed the presentation materials in preparation for these comments. Tri-State's subsidiary Western Fuels – Colorado, LLC owns and operates coal mines in Colorado that are currently permitted under these general permits, specifically Colowyo Mine (near Meeker, CO) and New Horizon Mine (Nucla, CO). The New Horizon Mine recently permitted an expansion area, New Horizon North Mine, under the combined general and stormwater permits. We appreciate the Division's plan to engage stakeholders early in the process to provide input on the permitting process. The enclosed comments are of particular interest to Tri-State given our recent experience on the general non-extractive industries stormwater permit, draft Colowyo Mine individual wastewater permit and future applications to all Tri-State mines.

In terms of process, the Division has stated that they plan to develop the draft permit and fact sheet based on the initial comments submitted by stakeholders as of August 17, 2012. Following this draft permit development, the Division envisions a 60-day public comment period starting in late 2012, with a formal public meeting and three outreach meetings around the state to occur during the public comment period. Then the final permit would be developed, followed by a pre-issuance stakeholder meeting, and final permit issuance with a delayed effective date. This schedule is aggressive and we are concerned that the information provided by stakeholders will not be available for others to review and comment on during the process, as issues may be common amongst the stakeholders or may spur other comments. We recommend that the Division publish all comments in a readily accessible format to allow transparency and recognition of the development of Division perspectives. Some comments were made during the meeting that off-line discussions were appropriate. Tri-State believes these off-line discussions, and any Division perspectives on them, should also be available for stakeholder review.





Ms. Kathy Rosow
August 17, 2012
Page 2

If you have any questions about these comments, please contact Chantell Johnson or Chris Gilbreath at 303-452-6111.

Sincerely,

Barbara A. Walz
Senior Vice President
External Relations and Environmental

BAW:CJ:pvt

Enclosure

cc: Chris Gilbreath
Chantell Johnson

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TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC.

Pre-Public Notice Comments on Renewal of CDPS General Permits COR-040000 (Metal Mining Stormwater and Coal Mining Stormwater) and COG-850000 (Coal Mining Process Water and Stormwater Combined)

The Division requested comments on several elements of the renewal permit proposals for the COR-040000 and COG-850000 general mining permits. As described in the cover letter, Tri-State's subsidiary Western Fuels – Colorado, LLC owns and operates coal mines in Colorado that are currently permitted under these general permits, specifically Colowyo Mine (near Meeker, CO) and New Horizon Mine (Nucla, CO), including the expansion area, New Horizon North Mine.

CDPS General Stormwater Permit COR-040000

The general stormwater permit for metal mining discharges (and some coal mining) was initially developed for application of non-effluent limitation guidelines (ELG) provisions. The remaining areas applicable to this permit include sedimentation pond out slopes, small area exemptions, and ditches along railroad lines and roadsides that do not collect in a sedimentation pond. These areas contain little, if any, industrial activity as defined by Regulation 61. Therefore, Tri-State recommends that the Division focus efforts on the control measures or best management practices (BMPs) in revising this general stormwater permit, if needed. Tri-State does not believe that application of numeric standards are appropriate based on these limited activities.

During the August 1, 2012 meeting, the Division presented several areas for comment and discussion including: 1) application time frame, 2) co-located activities, 3) limitations of coverage, 4) control measures versus BMP and installation/implementation specifications, 5) effluent limitations, 6) Stormwater Management Plan (SWMP) requirements, 7) inspections, 8) discharge monitoring, 9) reporting – Discharge Monitoring Reports (DMRs) and Integrated Compliance Information System (ICIS), 10) corrective actions, 11) ELG applicability, 12) permit scope, 13) clarification of areas at each site subject to ELGs, and 14) regulatory interpretation – process water versus stormwater. Tri-State has addressed comments related to each topic.

- 1) **Application Time Frame.** Tri-State agrees with the longer lead time on the applications (90 days proposed) given the mining process requires advance planning and other permitting, including Colorado Division of Reclamation, Mining and Safety (CDRMS) permits. Tri-State is more concerned with the Division's ability to review and act on permit applications in a timely manner.
- 2) **Co-located Activities.** No content was provided during the meeting on this issue. Therefore, Tri-State is unclear as to the Division's intent on this issue.
- 3) **Limitations of Coverage.** One of the limitations of coverage that the Division mentioned was construction activities. It is unclear if the Division is classifying routine construction

of access roads that are used to access active mining areas and isolate topsoil stockpiles, and reclamation areas as required under Surface Mining Control & Reclamation Act of 1977 (SMCRA) as “construction activities” potentially subject to the 1-acre threshold. This is an inappropriate extension of the Division’s authority as these access roads are continually evaluated, designed, constructed, reconstructed, and reclaimed as part of the mining process. Therefore, Tri-State requests that the Division clarify the limitations of coverage to not include any active mine permitted areas under CDRMS control.

Another limitation of coverage identified in the presentation materials is the stormwater discharges subject to effluent limitation guidelines (ELG). It is unclear if the Division is planning to include the areas subject to ELGs in this general permit. Currently, Tri-State and Western Fuels’ facilities maintain either individual or general combined process water and stormwater permits for application of ELGs. The impact of this type of major change (to include ELGs) to the stormwater general permit should be discussed with the broader industry in more detail to confirm that all unintended consequences are identified and understood.

- 4) Control Measures versus BMP; Installation/Implementation Specifications. The control measures, previously called best management practices or BMPs, in place at coal mines are developed and installed in accordance with the CDRMS permit that emphasizes contemporaneous reclamation and designed/engineered slopes with sedimentation ponds used to minimize sediment transport. As acknowledged in the Subpart H ELG for western alkaline coal mining, the sediment control plan and sediment transport modeling used for compliance with SMCRA are involved site-specific plans that require significant input and implementation. Therefore, the requirement for additional control measures separately for this stormwater general permit is duplicative and unnecessary. Tri-State believes that the Division should carefully evaluate the need for additional measures based on real concerns from actual pollution or degradation of state waters.
- 5) Effluent Limitations. As described above, the activities currently covered under the general stormwater permit for coal mines are very limited in scope. Therefore, Tri-State questions the need for additional numeric or narrative effluent limitations.

The state presented many slides on the Practice-Based Effluent Limitations (P-BELs) which are generally duplicative of the requirements under the CDRMS permit to conduct contemporaneous reclamation (which minimizes exposure of overburden or mined areas to stormwater runoff), and maintain the designed BMPs or control measures in accordance with the sediment control plans submitted and approved by CDRMS. Employee training is a significant aspect of any mine site, including focused attention to sediment and erosion controls and spill response. In addition, air quality permits required appropriate dust controls. Other environmental regulations require spill cleanup and reporting, preparation of Spill Prevention Control and Countermeasure (SPCC) plans. Therefore, Tri-State is unclear what additional protections are needed for coal mine sites that would be covered by this general permit.

During the discussion of water quality-based effluent limitations (WQBELs), the instream condition was raised by another stakeholder. It appears that the Division is unclear on how to determine compliance with water quality standards related to stormwater discharges from mining operations. Typical assessments of water quality standards in individual assessment-based permits provide for low flow protections from a continuous (or relatively continuous) discharge. However, during stormwater runoff, the natural background concentrations from exposed soil (consistent with arid and semi-arid climates like Colorado) are relatively similar to reclaimed areas as no overburden is exposed and active reclamation is underway. Therefore, Tri-State believes that the only appropriate application of WQBELs is related to activities that have some potential to exceed background conditions.

- 6) SWMP Requirements. Depending on the resolution of ELGs and other effluent limitations, as well as evaluation of the existing CDRMS regulation and oversight, it is unclear to us what actual additional SWMP requirements are appropriate. We will be evaluating the draft proposal in order to develop further comments.
- 7) Inspections. The CDRMS permit program requires monthly inspections by the assigned inspector. Therefore, Tri-State is unclear as to the need for additional stormwater permit related inspections, particularly runoff event inspections.
- 8) Discharge Monitoring. Monitoring from the limited areas covered by the general stormwater permit, i.e., access roads, pond out slopes, and small area exemptions, is excessive and inappropriate. The ELG monitoring was developed through a nationwide evaluation of mining practices; therefore, any monitoring should focus on these parameters.
- 9) Reporting – DMRs and ICIS. Depending on the outcome of the earlier comments, Tri-State questions the need for DMR reporting. The potential to report data that reflects background concentrations in the stormwater runoff from the covered areas is significant. DMR reporting is more appropriate for individual permits (including mining) that allow consideration and documentation of these site-specific concerns.
- 10) Corrective Actions. The general non-extractive stormwater permit (COR-900000) provides a very prescriptive process for documenting corrective actions. The mining process and CDRMS permit oversight/inspection provides for appropriate corrective actions to address stormwater runoff related issues such as erosion and sediment control. Therefore, Tri-State believes this use of corrective actions in the general mining stormwater permit is unnecessary and duplicative, potentially conflicting with CDRMS permit requirements.
- 11) ELG Applicability. This issue is addressed above Limitations of Coverage, Control Measures, and Effluent Limitations. For coal mining, the ELGs are applied in either individual or the general combined process water and stormwater permits. This is the more appropriate permit to address ELG applicability.

- 12) Permit Scope. The Division described the Limitations of Coverage under the current permit as those areas not covered by the ELGs. The Division also appeared to question whether coal mining should be included in this general permit along with hard rock and metal mining. Tri-State supports the use of a general stormwater permit for coal mining, and the use of either the combined process water and stormwater permit, or the individual wastewater permit for the application of ELGs.
- 13) Clarification of Areas at Each Site Subject to ELGs. If ELGs are included in this general stormwater permit, the areas subject to the ELGs should be clarified. However, as noted above, Tri-State supports the use of other permits for the application of ELGs.
- 14) Regulatory Interpretation – Process Water versus Stormwater. Tri-State agrees that the Division needs to review the definitions of process water and stormwater, which could require a modification of the applicable areas of Regulation 61. The ELG descriptions for active mining, coal preparation, and coal preparation areas seem to fit the process water definition. However, the surface runoff/drainage from reclamation areas is somewhat confusing as it relates to these definitions. This issue should be reviewed with a larger stakeholder group to ensure that any changes do not have unintended consequences.

CDPS General Permit COG-850000

This permit was developed to allow application of stormwater and process water provisions in relatively simple coal mining sites to allow efficient permitting when mixing zones or other more complicated water quality permitting tools are not required. However, during the August 1st meeting, the Division stated that the revisions to the general permit will also be considered and/or implemented in individual permits if the activities are consistent. Therefore, the group engaged in this permit renewal process should include all individual wastewater permittees. However, the Division did not make that clear during the notice of the Pre-Public Notice meeting so many stakeholders may not be appropriately engaged in the process. It should be made clear in the Colorado Water Quality Bulletin that the Division is planning this expansion of the permitting process.

The Division's presentation did not include very much detail on the revisions to this general combined process water and stormwater permit. Therefore, Tri-State plans to provide additional comment on the draft permit when it is issued for review.

HIGH COUNTRY CITIZENS' ALLIANCE

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(970) 349-7104 • FAX: (970) 349-0164
office@hccaonline.org • www.hccaonline.org

August 20, 2012

Janet Kieler
Permits Section Manager
Colorado Water Quality Control Division
4300 Cherry Creek Drive South
Denver, CO 80246
Submitted via email

Dear Ms. Kieler,

Please accept the following comments on behalf of High Country Citizens' Alliance (HCCA) and San Juan Citizens Alliance (SJCA) regarding the Division's formulation of Renewed General Stormwater Permits for Metal Mining and for Coal Mining, CDPS Permits COR040000 and COG85000 respectively.

HCCA was originally formed in 1977 in direct response to the original proposal by AMAX Exploration Inc. to construct and operate a molybdenum mine on the subject mining claims known at that time as the Mount Emmons Mine near Crested Butte. US Energy is now the project proponent and operator of the wastewater treatment plant and holder of both an effluent discharge permit and a certification for stormwater under the now expired general permit. The mission of High County Citizens' Alliance is to champion the protection, conservation and preservation of natural ecosystems within the Upper Gunnison River Basin. Although HCCA works on many conservation issues in the Gunnison Valley, its mission to protect the Mt. Emmons remains at HCCA's core. HCCA regularly participates in local, state and federal agency actions related to Mt. Emmons and the surrounding lands.

San Juan Citizens Alliance has been the lead conservation organization working in the San Juan Basin for since 1986. SJCA is a grassroots organization dedicated to social, economic and environmental justice in the San Juan Basin. SJCA organizes residents to protect our water and air, our public lands, our rural character, and our unique quality of life while embracing the diversity of our region's people, economy and ecology. SJCA's members live, work, play, and are deeply engaged with the San Juan Public Lands. SJCA has actively engaged in every major land management decision on the San Juan Public Lands for many years.

Protecting the land, water and wildlife of the Upper Gunnison River Basin since 1977.



HIGH COUNTRY CITIZENS' ALLIANCE

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HCCA and SJCA strongly support the Division's initial outline in which the renewed general permits would include increased monitoring requirements as well as the implementation of inspection and sampling procedures within all stormwater management plans. These additional permit provisions will properly inform corrective actions. Monitoring during various seasonal periods will enable the Division to develop a comprehensive picture of stormwater issues at individual sites. Likewise, inspections during runoff events (as inspector safety permits) is key to evaluating the effectiveness of stormwater management practices. HCCA and SJCA also support the implementation of benchmark sampling and sampling for water quality standards and the assimilative capacity of impaired waters. These discharge monitoring strategies can be undertaken jointly at a particular site on a minimum of a quarterly basis, preferably timed to capture seasonal variability.

HCCA and SJCA recommend that the Division devise strong and clear procedures for corrective actions. These procedures should include multiple triggers for corrective action in addition to inspector discretion, as well as public transparency and involvement to the extent feasible. Most importantly, if corrective actions are not taken by the operator within a specified time period, such failures should be considered permit violations. Without such motivation to adhere to corrective actions and timelines for compliance (which are too often extended again and again), inspections by the Division and its careful work to recommend corrective actions are not protective of the environment or compliant with the Clean Water Act.

In addition to monitoring and strengthening corrective action procedures, HCCA and SJCA believe that effluent limitation guidelines (ELGs) should be integrated into stormwater certifications, whether they are individual or combined with a discharge permit. Leaving ELGs out of stormwater certifications poses significant challenges to achieving water quality standards. Without effluent limits on stormwater discharge, regulators and citizens are unable to respond to water quality problems. Discharge from stormwater can be attributed to natural or background causes, and temporary modifications to water quality standards are often the answer instead of resolving uncertainty and moving forward with the tools provided by the Clean Water Act such as TMDLs or other long term solutions.



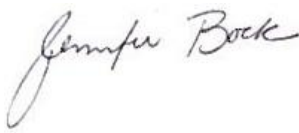
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HCCA's local experience has been that the current General Permit for metal mining is insufficient to provide adequate protection for the local community from stormwater pollution. Mt. Emmons is part of the headwaters of Coal Creek, a major tributary of the Slate River and a source of drinking water for the Town of Crested Butte. In the fall of 2010, the Division inspected the site and found the Stormwater Management Plan (SWMP) and its implementation insufficient in several ways including: that the SWMP did not address outdoor storage of chemicals and equipment, Stormwater Management Controls did not adequately address/identify drainage points of discharge such as groundwater springs or seeps, and that discharges from the reclaimed tailings surface and from an interceptor ditch contained metal concentrations exceeding water quality standards for receiving water. The Division asked US Energy to monitor stormwater outfalls and develop a plan to reduce metal concentrations, yet without consistent monitoring and consequences for failure to meet corrective actions, little progress has been made. Without ELGs for stormwater, the Commission has granted over 20 years of temporary modifications on Coal Creek and is about to issue another temporary modification which will trump the requirements of a pending TMDL.

Thank you for this early opportunity to comment on the renewal process for the Stormwater General Permit for metal mining and coal operations.

Regards,



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